

WORLD



TRANSPORTATION

(REG. U. S. PAT. OFF.)

AIR CARGO ★ ★ ★ AIR COMMERCE ★ ★ ★ AIR TRAVEL

AUGUST
1947

In
This Issue

Import-Export
Air Cargo

Why and How of
Cargo Terminals

What Part Should
Flight Forwarders
Have in the
Development of
Air Freight?

The Non-Scheduled
Front

Flight Forwarders

Why all your favorite
airlines as well as the
airline of the future
need a certificate of
airworthiness and
how to get it

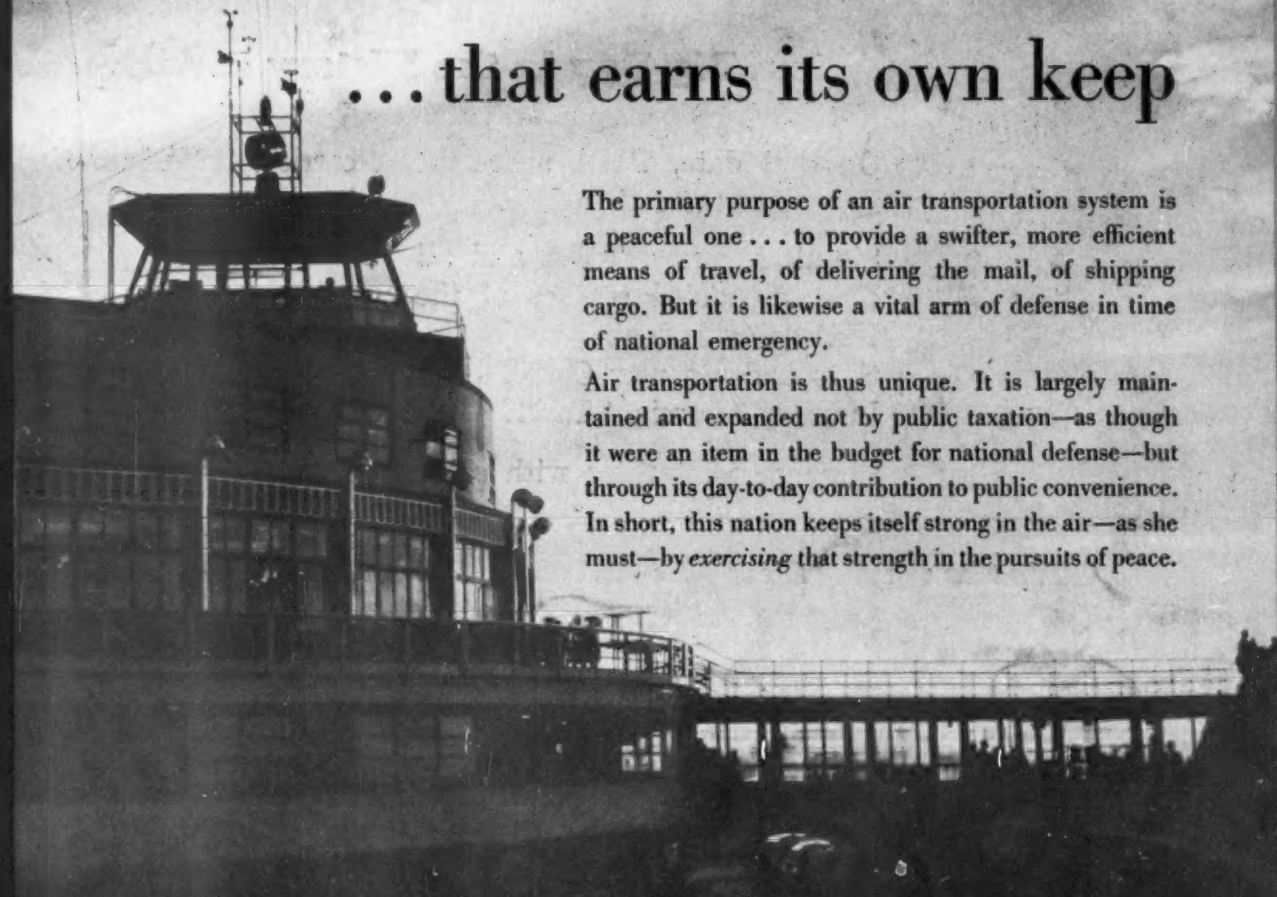


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... that earns its own keep

The primary purpose of an air transportation system is a peaceful one . . . to provide a swifter, more efficient means of travel, of delivering the mail, of shipping cargo. But it is likewise a vital arm of defense in time of national emergency.

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THAN 25%!"**

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the air shipping headquar-
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Through joint rates with other

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hollow steel blades... selective fixed pitch...
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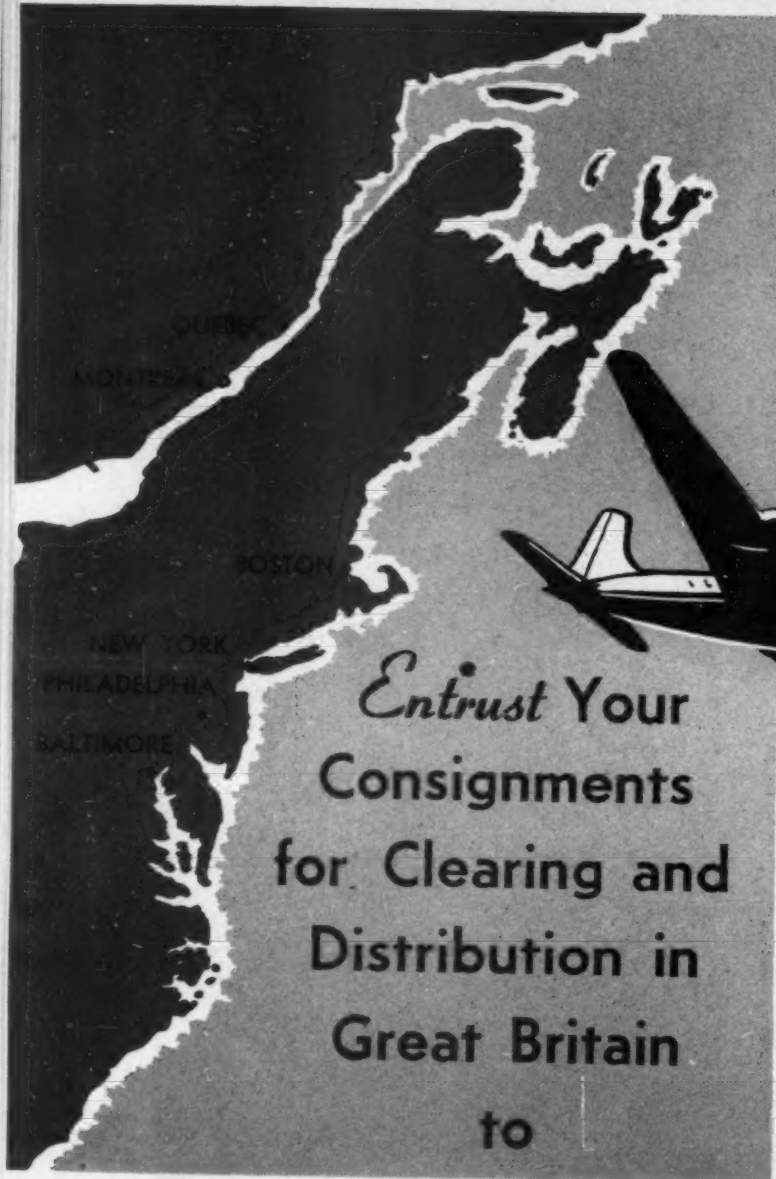
Lockheed 649 and 749
Constellation
Boeing B-50 Super-Fort
Lockheed XR60 Constitution
Consolidated Vultee B-36
Super-Domby
Martin JRM Mars
Boeing 377 Stratocruiser and
YC-97 Series Transports
Consolidated Vultee XC-99
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Douglas C-74 Globemaster
Douglas DC-6
Republic RC-2 Rainbow and
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Hangar Chatter

NEWS item in The New York Herald Tribune:

"A rampaging Hereford steer interrupted all air traffic today at Newark Airport for a few minutes. The animal escaped from the Haydu Packing Company, 75 Stockton Street, Newark, and wandered through highway traffic to the airport, pursued by two police radio cars and a truck with four of the abattoir's employees. The animal ran through Gate 1 at the field and galloped about the runways to the delight of the hundreds of waiting passengers. A radio message closing the field to traffic was sent out from the control tower. The truck finally ran into the steer and bowled it over, allowing the police and packing company men to pounce on it."

The above described revolt should not be taken lightly. Here, at long last, is the aeronautical counterpart of the bull on the railroad track. Which points up the oft-mentioned fact that all forms of transportation are more or less alike. And that's not bull!

You've heard of the train which ran into a cow and cut it into halves. But have you ever heard of the plane which ran into such a cow and cut it into calves—in a butcherish sort of way, of course?

It's not hard to imagine the tower radioing: "Tower to 456. Tower to 456. Steer on runway." And the plane calling back: "456 to tower. 456 to tower. What's today's quotation on beef?"

The Newark incident should be an incentive to such airlines as Braniff and Slick, the first based at Dallas and the second at San Antonio. Now's the time to equip every transport with a lasso. Texans should know.

Enterprising butchers can find excellent pieces of promotion at the airport. For example, why not signs of this sort?—"Freshly Killed Beef. Each Steak Carries the Seal of Approval of Hamilton Standard Propellers." Or—"Curtiss Electric Propellers Guarantee Freshness." Or—"Killed Today at the Newark Airbba-toir."

Senator Taft probably is looking askance at this whole business, wondering whether this new streamlined situation will bring a head-on collision between the air transport pilots' and butchers' unions.

Our Hector Van Peep cautions the administrators at Newark Airport to keep a wary eye for errant cattle. There is danger, he thinks, of a boycott by vegetarians should such an incident repeat itself.

But our Zeno McInnify, who has a well-balanced mind, points out that such non-scheduled occurrences can be regulated by the Civil Aeronautics Board under Section 292.1 of the Economic Regulations. The entire board, he is certain, will testify to the fact that airport-visiting cattle fall into the "irregular" category.

R. M.

AIR TRANSPORTATION

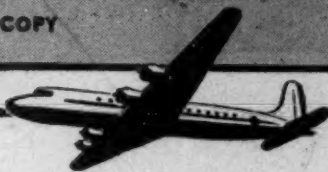
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THE COVER—"Bird of Peace that earns its own keep"—a strong message by the scheduled airlines of the United States.

JOHN F. BUDD, Editor and Publisher

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**"The boss's airplane
saved us a
shutdown today"**

The stockpile of lead at the Bowers Battery and Spark Plug Company, Reading, Pa., was just about gone—and a lot of jobs would go with it. Scrap lead was to be had only if someone could get to a war surplus sale and inspect, bid and buy—in a matter of hours.

Thanks to an alert president, C. P. Bowers—and to his company's Beechcraft Executive Transport—those jobs were saved. In a 200 mph race with time, the bids were filed and the materials acquired.

The twin-engine Beechcraft Executive Transport has proved itself in the service of nearly 400 business corporations, economically and efficiently transporting executives, technicians and sales personnel to and

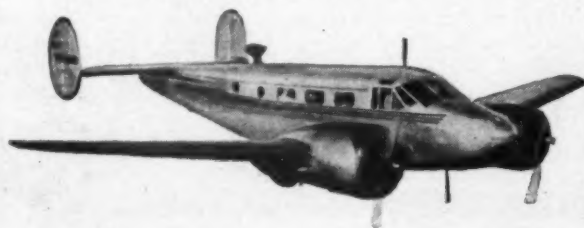
from factory, branches, and markets at substantial savings in time and money. It accommodates up to nine people. It is gratifyingly quiet and comfortable. It is a fully equipped aircraft, for all-season, day and night operation.

As company transportation, the Beech Executive Transport pays its way—and returns a substantial dividend of rest and relaxation for harried executives to whom it gives the time and opportunity to get out of harness, now and then, for needed recreation.

There is a Beechcraft distributor near you with wide experience in company-owned air transportation. Ask him to study your requirements. No obligation, of course.



"Our business," says Mr. Bowers, "requires plants located hundreds of miles apart, from Massachusetts to Monterrey, Mexico, and from Macon, Georgia, to Oregon. The fast comfort of the Beech permits me and members of my staff to maintain a frequent, economical, and otherwise almost impossible personal contact with each of these operations. It is not uncommon for me to dispose of my morning's mail in Reading, visit our Elkton, Maryland, plants, go to Macon, arriving in mid-afternoon to spend several hours there, then fly on to Houston, arriving in time for a full night's rest."



Beech Aircraft

CORPORATION



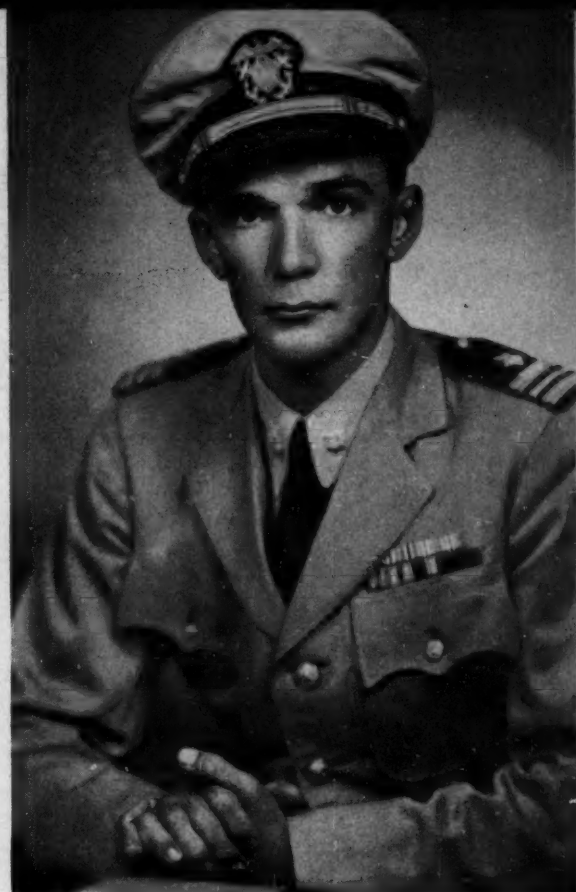
WICHITA, KANSAS, U. S. A.

*An appeal to international air carriers to take advantage of the
vast potentials in global air cargo*

By LIEUTENANT COMMANDER

LANGDON P. MARVIN, JR.

United States Naval Reserve



Build Import-Export Air Cargo

ONE of the main assumptions at the heart of the argument for consolidating the international airlines of the United States is the supposed shortage of future traffic. This assumption is incorrect. Almost entirely overlooked by the civil airlines, by Government aviation activities, etc., has been the large potential in international air cargo.

This is a very sizeable source of business, as yet hardly tapped by the passenger-minded airlines—a potential which not only gives new opportunity for the commercial interests but which can also nourish the creation of a sizeable reserve of long-range cargo aircraft—just the types which would be needed by the armed services in time of war. While my studies are not completed, they indicate so far the likelihood of an air cargo traffic potential from imports and exports at least as big as the passenger prospects. If this point can be proven, then American airlines operating abroad can look forward to twice as much business as they currently appear to expect.

For a specific example, I refer to my *Air Import Potentials*, which, by very careful and conservative commodity-by-commodity study showed an air cargo

potential inbound from China to the United States—the limiting direction in a transpacific traffic pattern — of 3,000,000 pounds a year, bringing in \$2,600,000 a year of airline revenues, whereas one of the principal applicants, Pan American Airways, in their exhibit to the Government, indicated an expectation of only 152,000 pounds a year of air cargo on the same route, at approximately the same rates and argued against the certification of another airline. (The choice of air carrier for this 3,000,000-pound-a-year cargo potential would be largely in the hands of American importers, so that if the United States flag airlines are alert, they will get the great bulk of the business.)

Nearly all the other airlines involved in that particular Pacific case, heard before the CAB, also largely forgot about cargo and concentrated their study on passengers.

It is important to note that the cargo potentials of 3,000,000 pounds a year on that route from China to the United States are the equivalent of 13,333 air passengers—more than the total air passenger prospects worked out by the airlines in their applications to the CAB to fly that route. In other words, inter-

national cargo (the thing that was so much overlooked in this CAB case) looks like bigger business than passengers.

I believe that if the airlines which have been granted international certificates by the Government devoted as much study, time, and effort to cargo as they have done during the past many years to passengers, they would discover for themselves that there is perhaps twice as much business to be had in the international field as they now anticipate.

If that is true, then it seems to me that we should be much less concerned about the hair-splitting percentages of passenger traffic which foreign carriers may take away from United States flag carriers. Instead of worrying about losing some passengers to foreign airlines airline executives could be more helpful to the United States by developing in a big way a whole lot of new business-cargo which would much more than compensate them for any passengers they might lose to foreign lines! This new cargo business would make consolidating the existing airlines unnecessary.

The future development of long-

(Concluded on Page 38)

The Why and How of Air Cargo Terminals

By ERIC RATH, President, Airload Service, Inc.

Some expert advice on decreasing air cargo costs and increasing transit speed

TERMINAL costs represent an ever-increasing part among the basic expenses of surface transportation. From year to year, the lack of adequate cargo facilities becomes more aggravating for the railroads, water and motor carriers concentrating at the great freight producing areas. In the present state of affairs, cargo congestion in the New York area, alone, represents a yearly figure of many millions of dollars as total loss to our cost of living, distribution, and manufacturing potential as a nation. It seems to be too late to remedy this accumulation of disturbances through minor corrections, and only a super-cargo terminal system costing more than any one economic unit of carriers can afford, would be able to give relief. Leading researchers of transportation agree that low-cost remedies can be applied to modify terminal systems only as long as any mode of transportation is young and still developing. Once certain procedures, terminals, and systems are established, only a costly replacement can create betterment.

Just the Beginning

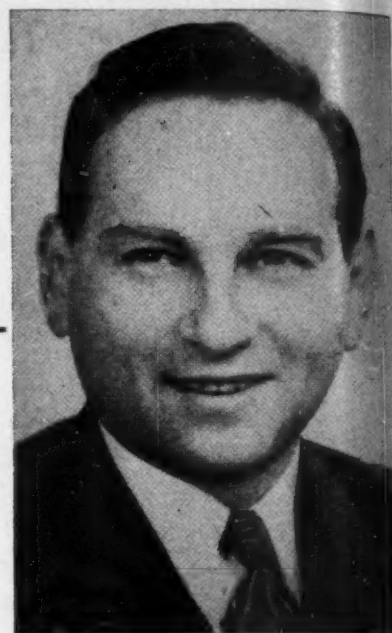
Air cargo today is just beginning to make itself felt. Already ground facilities are inadequate. If the errors of the railroad and motor carriers are going to be repeated, air cargo will find itself very soon faced with conditions even worse than those hampering surface transportation.

The search for adequate air cargo facilities began when our armed forces suddenly faced the great demand for fast transportation. Some temporary cargo facilities built at that time have, unfortunately, since remained deserted because our armed forces have been reluctant to turn the facilities over for civilian use, although they are urgently needed. Thus, at this time, when airport development has been recognized as one of the nation's im-

portant programs, details and requirements of air cargo terminals should be fully considered in the light of the progress and volume of this transportation.

Most airport constructors name two reasons for their reluctance to include definite air cargo terminals among their plans:

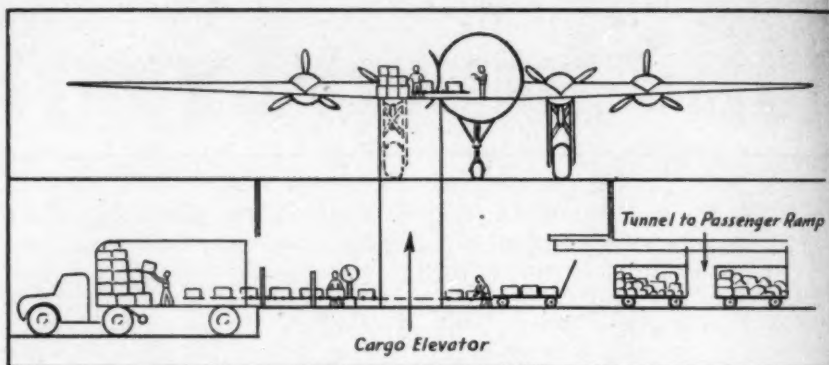
(a) Uncertain volume of air cargo.



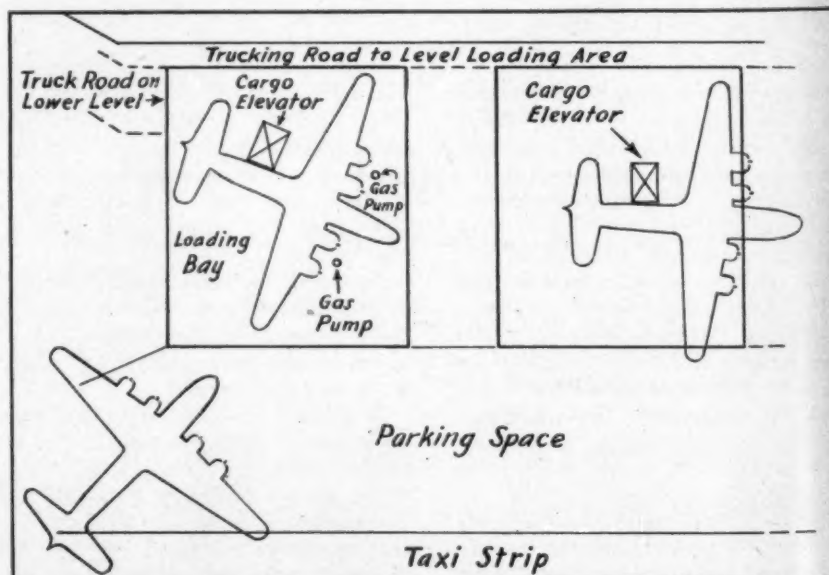
Eric Rath

(b) Absence of industry-wide formulation of requirements.

To this, the great variety of types of aircraft engaged in this form of air



An underground terminal station



Distribution of loading bays and approaches

UNITED SLASHES AIR FREIGHT RATES 25%!



New rates average only 20½¢ per ton mile.

Air freight rates on United Air Lines' nationwide system were slashed approximately 25 per cent on August 1.

Under the new low rates, you can now send small shipments for as low as 20½ cents a ton mile. On shipments over 16,000 pounds, United's air freight rate will be 14 cents a ton mile.

Now more than ever you can reduce inventories, cut warehousing costs with United's frequent, de-

pendable, fast, economical Air Freight Service. 4-engine, 9-ton capacity Cargoliners fly between major markets. Smaller Cargoliners reach intermediate markets. And, every United passenger plane carries Air Freight . . . offering round-the-clock flights between 70 key cities, and connecting "World Air Freight" service to major markets everywhere.

Call your local United sales representative or write United Air Lines, Cargo Sales Division, 5959 S. Cicero Avenue, Chicago 38, Illinois.

Examples of United Air Lines' new, lower Air Freight Tariffs

100 lb. shipment	Flying time	new rate	old rate
PORTLAND TO SAN FRANCISCO	3 hrs.	\$ 6.10	\$ 8.45
CHICAGO TO BOSTON	5¾ hrs.	8.95	12.43
NEW YORK TO DENVER	10 hrs.	16.35	23.03
DETROIT TO LOS ANGELES	10½ hrs.	20.00	27.00
MILWAUKEE TO SEATTLE	15¼ hrs.	17.50	24.35

AIR FREIGHT SERVICE

Pickup and delivery in all major cities



commerce, the multitude of types of operations, and finally, the hostility among the different groups of carriers, should be added. No wonder that airport executives are left guessing just what to plan.

Current Conclusions

Based upon the experiences drawn from air cargo services in the metropolitan area, the present study will outline things as they stand today. In no form will it be possible to imagine all the possibilities of this new industry for the future, but it seems that present day operations allows us to draw conclusions, which, if properly applied, will lay the foundation for a safe development of air cargo facilities in the future, geared to increasing needs and experiences.

The greater New York area, as air cargo generating unit, includes New York, Bronx, Kings, and Queens counties, Rockland and Westchester Counties; in Connecticut, Fairfield County; and in New Jersey, Bergen, Passaic, Union and Essex Counties.

The following table gives the approximate figures only, since most cargo carriers have submitted little or no reliable and trustworthy figures:

CARGO MOVEMENT IN THE NEW YORK AREA Inbound and Outbound (Approx. Per Month)

Airport	On Passenger Craft	On All Cargo Craft
La Guardia		
Domestic.....	1,200,000	800,000
International.....	200,000	150,000
Newark.....	300,000	2,000,000
Teterboro.....	75,000	900,000
Total for New York.....	1,775,000	3,850,000

The Port of New York Authority has estimated a yearly cargo volume of 800,000 tons for the port area within the next seven years. As can be seen from the present figures, this estimate represents just about 20 times the present traffic. To judge from the day-to-day development, it is a very conservative and careful figure, well enough estimated to serve as a basis for the consideration of a minimum of cargo facilities for New York's airports.

New York's air cargo facilities thus should be designed to be capable of handling at least 250 tons of cargo per day. This amount of freight and express would move both by all-cargo and passenger aircraft. If the airlines increase their present load factors for

passenger craft, it would be reasonable to expect that they would lay greater emphasis of cargo transportation on all-cargo craft. To be safe, facilities should be appropriate to handle 60 percent of all freight on cargo, the balance on passenger airlines.

Accent on Speed

Air freight lays emphasis on speed. Overnight delivery anywhere in the United States today is the slogan of Air Cargo, Inc., the new airline-owned forwarding organization. The same development can reasonably be expected that similar short-term deliveries will be required for international air freight.

In order to make speed valuable to the commercial shipper it must coincide with his normal business procedures. All freight will, therefore, be available in the afternoon, and delivery will have to be made in outlying destinations during the next day. This means that the aircraft have to take off late in the afternoon or early in the evening. It can, therefore, be expected that most cargo loading will coincide for most carriers, and during the afternoon almost 90 percent of the daily cargo will have to be loaded, most between 4 p. m. and 10 p. m. This will require cargo

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THE WORLD AIRLINE WITH
THE EXTRA MARGIN OF EXPERIENCE

SABENA Belgian Airlines, now offers to American shippers the same speedy, reliable air cargo service renowned for 24 years across Europe and Africa.

Features:
THROUGH ROUTING
EXPERT HANDLING
ONE AIRWAY BILL
LOW INTERNATIONAL RATES

Internationally-trained crews with that EXTRA margin of experience fly your shipment fast and sure to its destination!

SABENA

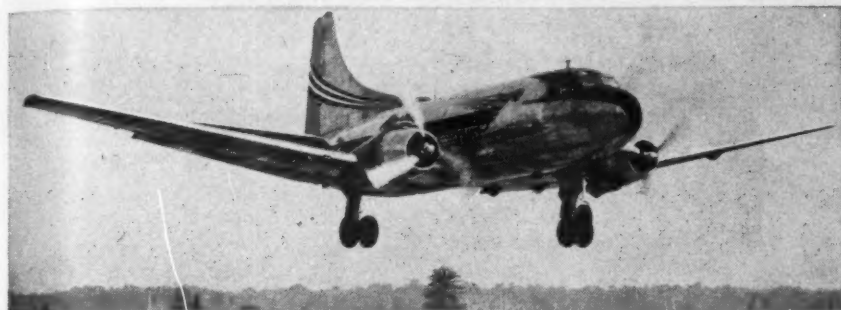
BELGIAN AIRLINES

422 Madison Avenue, New York 17, Plaza 3-1800

Martin Memo

Published by The Glenn L. Martin Company
Baltimore 3, Maryland

four seconds to read that aloud and that's all the time it takes for the landing gear of the Martin 2-0-2 to retract. Exact figure is 3.9 seconds. This quick reduction of drag at take-off is an added safety factor, and enables the 2-0-2 to reach its high cruising speed faster.



Toughest Test Yet . . . After having flown a distance greater than three times around the world during early flights and on CAA tests, the new Martin 2-0-2 was subjected to a grueling accelerated service test. First of its kind, the test consisted of a series of flights carried out under actual airline operating conditions. It covered a nation-wide network of more than 18,000 miles and included landings at more than 50 different airports. By meeting the varying extremes of altitude, weather and airport facilities encountered, the 2-0-2 offered further proof that it is America's top twin-engine airliner.

Pilot's Third Arm . . . The revolutionary new automatic propeller feathering system, developed for use on the Martin 2-0-2 and 3-0-3, permits, for the first time, full take-off weights and maximum operating economy on a twin-engine airliner. Thoroughly tested, this latest Martin development assures top performance during complete or partial engine failure on take-off. The system, in effect, feathers the propeller when the windmilling drag exceeds the thrust and at the same time cuts off the fuel booster pump. Pilots can easily over-ride the automatic system if they desire. Operators will benefit directly, as the use of the automatic feathering system allows greater take-off payloads.

rests on air power. America must be kept first in the air." To keep America first we must continue our advanced aviation research and maintain an aircraft industry capable of rapid expansion in an emergency.



Look What's Up . . . The new Martin XB-48, latest pride of the Army Air Forces, gets a powerful push from its six jet engines . . . zips along at extremely high speeds . . . is the largest conventional multi-jet plane yet constructed . . . pioneers a new bicycle-type landing gear developed by Martin for our AAF. After its first flight on June 22, the XB-48 made its next three flights during the following week. An exceptional record for most newly designed planes, but not for a Martin plane. For example—the Martin 2-0-2, which made its second flight 15 hours after its first, had a record of nearly 100% availability during the rigorous testing period.

Zip, and They're Up . . . Thousand one, thousand two, thousand three, thousand four . . . it takes

Faster, Express-Speed Schedules

. . . on short-haul runs are possible with the Martin 2-0-2. This speedy airliner cruises 100 m.p.h. faster than the planes it supplants. This extra speed enables operators to cut schedule time by $\frac{1}{3}$ —build passenger acceptance—get more trips between inspections. In short, the new 2-0-2 cuts costs, builds profits for airlines.



Slip 'Em In . . . No tear-down is necessary to inspect or replace the Martin 2-0-2's Mareng fuel cells. Easily installed or removed through especially designed hatches (above), these flexible cells provide safe, dependable storage for the 1030 gallons of gasoline carried by the 2-0-2. And being flexible, the two tanks (each consisting of four inter-connecting Mareng cells) are less likely to rupture when subjected to continuous vibration or excessive stresses and strains. Intricate corner assemblies, excessive riveting and troublesome metalwork are eliminated.

New Wings for the World's Airways . . . Modern Martin 2-0-2 luxury liners offer new standards in speed, comfort and dependability . . . carry 36 to 40 passengers at speeds 100 m.p.h. faster than the planes they supplant. Air travelers and shippers will gain more time than ever before when they fly and ship in Martin transports on leading airlines. First deliveries on the new Martin 2-0-2 are to Northwest Airlines, with deliveries to follow to other North and South American airlines.

Keep Our Air Arm Strong . . .

The American Legion's intensive Air Power educational program is bringing to the American people the knowledge that Air Power is Peace Power and that without air power there can be no security for the nation. In a statement to members of the American Legion, Paul H. Griffith, National Commander, stated in part, "The destiny of the United States and the world today



Martin

AIRCRAFT

Builders of Dependable Aircraft Since 1909

facilities which are able to handle at least six carriers at the same time without prejudice.

Indeed, many planners have thought of establishing special cargo airports. The operation of Air Cargo, Inc. does not favor this separation of cargo from passenger operations. Instead, it seems rather more feasible to separate maintenance bases from operational fields, which would be like ship's piers separated from the ship yards. Personal flying would easily be combined with maintenance on separate airports.

The operational airports, thus, will have to take care of cargo as well as all passengers. This combination requires a very careful analysis of the specific needs of cargo ground operations. The problem will involve several considerations:

1. Types of Cargo: Based on present day operation and surveys made, the following groups of cargo would be potential elements for cargo service:

(a) Parcels and express form one group of mostly high value, but small size shipments. The great variety of forms and shapes presents the most intricate handling problem for this type of freight.

(b) Style goods have taken to the air almost completely. Containers are of certain standard sizes, yet the low average density makes this type of

freight difficult to handle on account of volume and bulk.

(c) Flowers are accounted for as permanent air freight items, generally packed in hampers or large boxes that require a large amount of space.

(d) Perishables, although far less frequent than usually believed, move mostly in full plane loads. Frequent or exposed handling would destroy the possibility of air service for strawberries, tomatoes, seafood and okra.

(e) Spare parts for automotive, aviation, steamship, and electric power plant equipment have now become a steady air cargo item. Here we have small units with very high density, alternating with many odd shaped items which are shipped unpacked. Complete automobiles, airplane engines, and other heavy machinery present themselves as a frequent item requiring special rigging and dunnage for the ground handling.

(f) Bulk cargo of cigarette cartons, bananas, pineapples and small packages of drugs present a problem of another kind.

(g) Live animals, such as stud and race horses, breeding cattle and wild animals form still another special category.

2. Types of Aircraft: Three key features have to be considered to find the adequate terminal design for our aircraft:

(a) Elevation of cargo door:

(b) Level of cargo floor.

(c) Form of cargo space.

(1) The DC-3 is the only type of commonly used aircraft with cargo door at truck bed level. Since this type of airplane brings relatively high operating expenses, combined with small capacity, it is quickly disappearing from large scale cargo operation. The DC-4 and C-46 which are the more adequate aircraft, have their cargo doors eight to 10 feet above the ground; the same situation exists for the Martin 202. The Fairchild Packet and the Boeing Stratofreighter, in Army use today, are of truck-bed level. The announced Curtiss CW-32 and the Northrop Pioneer (which is similar to the trimotor Ford of the past) have really far to go before they become commonplace in large-scale commercial operation.

(2) Inclined levels on board the DC-3 and C-46 cargo planes present difficulties for ground handling and loading. All other air freight ships have level floors and future ships will probably follow this same pattern.

(3) As long as the present round contour prevails for the cargo space of the aircraft, hand stowing will be necessary for the complete useage of the available space. The Packet presents a box-car shape. The Cur-



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AIR--X--PRESS

GIVING MOTHER NATURE a gentle nudge, Air Express went in the transplanting business for a few hours last month. It sped 17,000 Virginia seedlings of newly-developed Williamsburg alfalfa from Richmond, Virginia, to Salt Lake City, Utah, to be planted in the dry, sunny climate of the Salt Lake region. Experts of the Virginia Agricultural Experiment Station and officials of the Southern States Cooperative explained that the seeds produced from this transplanting will be replanted from year to year until 1950 when sufficient quantities are expected to be available to Virginia farmers. Packed in six boxes weighing 300 pounds, the seedlings were air-expressed from Richmond at noon on a Thursday, arrived in Salt Lake City on Friday morning and were imbedded in Utah's fertile soil by Saturday afternoon.

★ ★ ★

AN AMERICAN camera manufacturer utilized the combined shipping facilities of domestic and international Air Express recently to introduce a new model to foreign markets. A shipment of a dozen new cameras was air-expressed from Minneapolis, Minnesota, to a dealer in Calcutta, India, transferring to international air service at New York. Taking due notice of this most modern marketing method was *The Minneapolis Star* which published a two-column photo of the shipment being packed for forwarding.

★ ★ ★

TO CALL attention to its famous anthracite coal producing region, a Pittston, Pennsylvania, newspaper recently arranged to air-express sample shipments of local anthracite to New York, Washington, D. C., Montreal, Canada, and London. It was believed to be the first instance of anthracite shipping by Air Express.

★ ★ ★

WHEN a business concern in San Juan, Puerto Rico had urgent need for a supply of paper bags and tape recently, it called on Air Express to fly the material down from a manufacturer in Savannah, Georgia. The entire shipment, weighing almost 3,000 pounds and consisting of 38 pieces, was flown in domestic airline service from Savannah to Miami, they by international air express direct to San Juan. Time in transit: less than 16 hours, from mid-Friday afternoon to early Saturday morning!

★ ★ ★

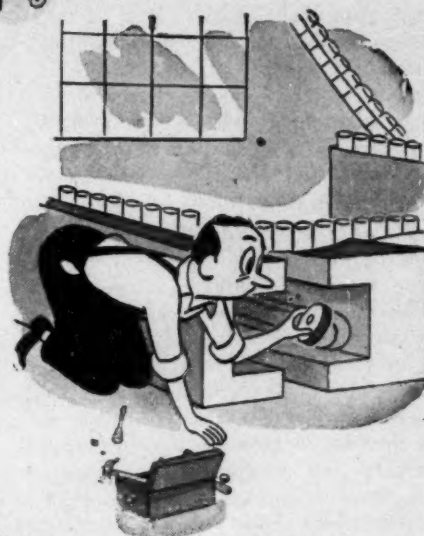
IN THE FIRST recorded instance of trotting horses being shipped in domestic Air Express service, two champion harness racers, April Star and Jimmy Creed were flown from New York to Chicago one day last month. Also making the trip in a chartered DC-4 cargo plane were the horses' owners, Robert L. Craig of Urbana, Ohio, and Silas Thompson of New Ross, Ind., in addition to two attendants, two racing sulkeys and miscellaneous racing gear. And last but by no means least, there was Elmer, a lusty-crowing rooster, perched on the end of April Star's stall. Wherever and by whatever means of transport April Star goes, so goes "Elmer."

What's so "alike" about these businesses?



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1927—20TH YEAR OF GETTING THERE FIRST!—1947

tiss-owned United States Patent 2,387,527, combines the box-car form with the idea of a detachable cargo Speedpak as applied for four tons of additional payload on the Lockheed *Constellation* in the form of a detachable body.

3. Transfer Problems: Air cargo's greatest handicaps lie in the distance between the airport and the shipper. The feeding and distribution of air freight thus become an air freight terminal problem. Today, mostly truck trailers are used for full loads and small vans are used for the cartage. Helicopters, however, can be expected to enter this field as this type of aircraft can provide transportation with an equipment cost of below \$10,000.

4. Terminals: Numerous requirements have to be fulfilled by the terminal freight house. Consolidation of loads for all cargoplanes correspond to the establishments of "cargo banks" for passenger aircraft from where the fill-up loads can be drawn in accordance with last-minute requirements. Extensive documentation has been done in the terminal in connection with billing, marking, and routing. Transshipments from here to surface carriers and in-transit storage have definite space requirements. Today one can easily find over 50,000 pounds of air cargo each



Part of a one-shipment cargo of 8,824 pounds of radios and radio-phonographs shown as they were unloaded from a Railway Express Agency truck at Newark Airport. The cargo, some of which was stowed in the Speedpak (shown at the left), was flown by Eastern Air Lines to Miami and then transferred to international air express service for movement to final destination in Havana.

night in the corner of the different hangars at LaGuardia awaiting proper departure.

5. Stevedoring Elements: Loading and unloading of air cargo today is a slow and expensive manual process. Since 70 pounds is the average one-man handling limit, crews of four to six men are required for each of the larger cargo ships. The mechani-

zation of the loading has been the object of many extensive studies. Airload Research Service has established certain rules during a four-month experimentation period. Fork lifts are helpful for heavy cargo. Present day cargo is better served, however, by motor belt conveyors as freight must be moved from the truck bed to the elevated cargo door. Ordinary roller conveyors, if pos-



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PAN AMERICAN WORLD AIRWAYS

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sible, of the extension type normally provide the best method for speedy picking if cargo can be handled at the same level. A truck ramp designed and built at Newark Airport has given excellent results as to speed of loading. On such a ramp one cargo handler can load, stow, and secure approximately 6,000 pounds of freight per hour in a DC-4 cargo plane, while his capacity sinks to 2,000 pounds with the DC-3 cargo plane, or with the use of fork trucks.

The table on this page gives a comparison of stevedoring data for the three most popular cargo aircraft today.

6. Traffic Security: With increased freight movements on airports greater emphasis must be laid upon complete separation of truck traffic from airplanes. Damage to aircraft, even fire hazards, are often incurred today when trucks in their normal routine cross taxi strips and approach aircraft parked on the field.

The Newark test ramp presents none of these dangers. It is, however, noted that many operators of aircraft dislike the large and permanent cargo ramps, because they require special towing of aircraft into position and also might endanger structural parts of the craft

AIRCRAFT STEVEDORING DATA			
	DC-3	C-46	DC-4
Elevation of door from ground level	4'	8'	10'
Position of cargo floor	Inclined	Inclined	Level
Cargo capacity	7000 lbs.	12,000 lbs.	18,500 lbs.
Best loading crew	4 men	5 men	6 men
Time required with various methods of ground handling:			
Hand loading	45 minutes	100 minutes	135 minutes
Fork truck use	45 minutes	60 minutes	90 minutes
Motor conveyor	45 minutes	45 minutes	60 minutes
Truck ramp and roller conveyors	45 minutes	45 minutes	30 minutes
Optimum per man-hour	2000 lbs.	3000 lbs.	6000 lbs.

if the towing from and into position is not carefully executed.

Taking into consideration all pre-cited requirements and experiences, a list of "musts" can be established for a standard cargo terminal at the larger airports:

(a) Located in the far corner of the airport, away from passenger buildings: The terminals should consist of:

(1) Freight station for receiving, billing, consolidation and storage of

at least 8,000 pounds of cargo per day.

(2) Special truck approach road and platform for 15 to 20 trucks, mostly 30-foot trailers.

(3) Five loading bases for simultaneous serving of major aircraft.

(4) Parking space located between the taxi strip and the loading space for at least 10 major and 10 minor aircraft.

(Concluded on Page 33)

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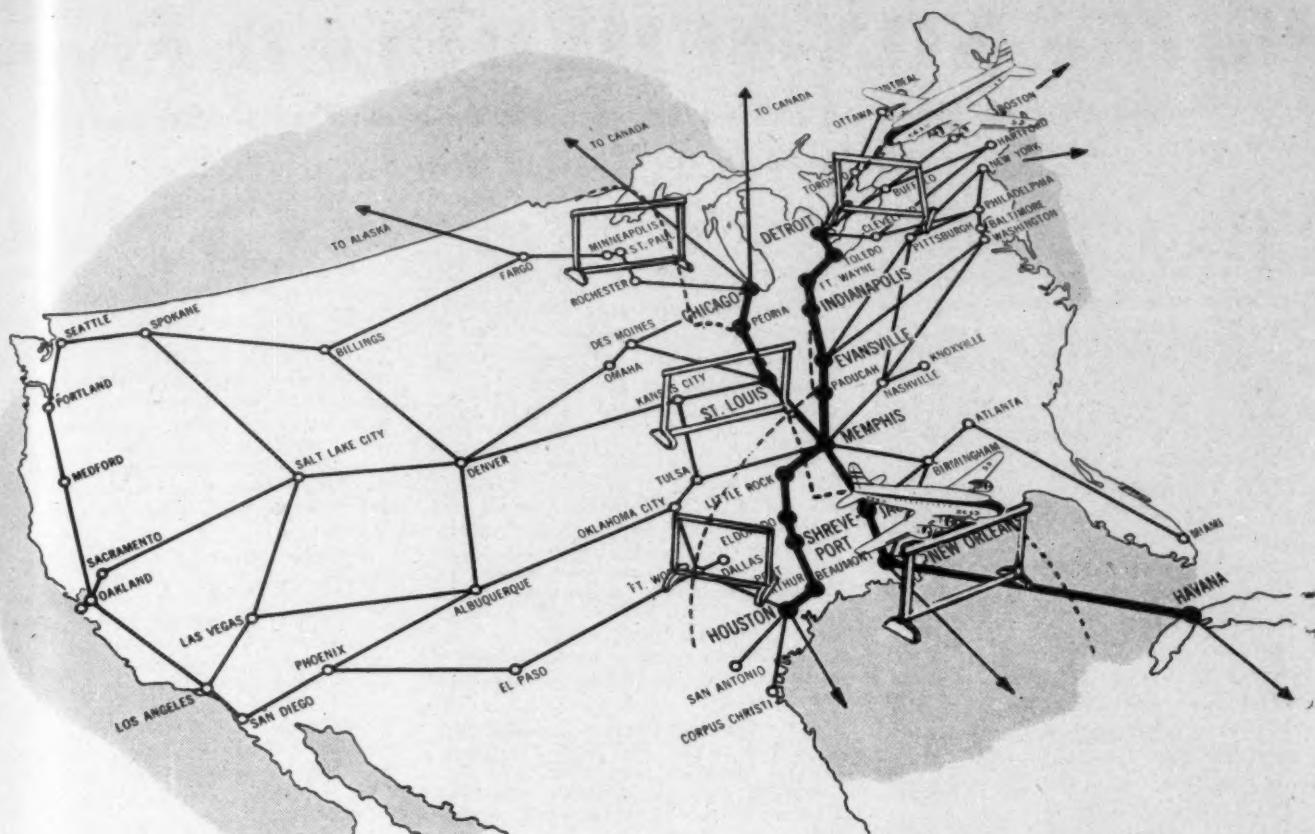
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CHICAGO AND SOUTHERN ★ AIRLINES

On the NON-SCHEDULED Front

Notes and jottings on the latest activities of the non-scheduled airlines in the United States

THE Civil Aeronautics Administration took a dim view of the future of non-scheduled air carriers in a recently released report, pointing out that 15 percent of the operators (according to the CAA there are 3,600 of them, but nobody knows their names) do 90 percent of the business. It called 85 percent of the nonskeds "economically insignificant."

This year, the report said, "the nonskeds 'will carry a steadily diminishing portion of domestic passenger and freight traffic . . . as the scheduled airlines push sales and improve their facilities.'" It was pointed out that these operators received their biggest chance during the postwar reconversion period when the scheduled airlines were low on seats and high on requests. Last year the nonskeds took the lion's share of the air freight business, with Slick, Flying Tigers, California Eastern, Air Cargo Transport, U. S. Airlines, Willis, Flamingo, and several others flying 30 million ton-miles. (The scheduled airlines flew 14,830,000 ton-miles). But now that the scheduled airlines have been awakened to the vast potentialities of freight-flying, they are expected to give the nonskeds a terrific battle.

However, most of those responsible for the high freight figures of the nonskeds are now among that category known as non-certificated cargo carriers (see May, 1947 issue of AIR TRANSPORTATION) who last month became common carriers through letters of registration issued by the Civil Aeronautics Board. This action permits them for the first time to advertise their rates and schedules, and requires the filing of tariffs. Holding Letter of Registration Number One is U. S. Airlines, of St. Petersburg, Florida.

While the CAA is gazing sorrowfully at the nonsked picture, it would be well not to confuse this with the happier outlook for those who originally placed their faith and money in air cargo. It goes without saying that by far the greatest percentage of the nonskeds are one-, two-, and three-plane outfits, often flying Piper Cubs, Stinsons, and other personal-type planes. Often these airlines are one-man firms, seeking passengers for hops over lakes, to vacation resorts, emergency flights, etc. These, no doubt, will continue their operations; but it has been the larger passenger outfits, operating Army-surplus C-47s with bucket seats, that have felt the sharp

edge of the financial axe. The heyday of catch-as-catch-can New York-Miami and the longer transcontinental flights are disappearing rapidly. Those nonsked passenger outfits that operated on a sound financial basis have weathered the storm and probably will exist.

Other developments in this field follow:

- CALIFORNIA EASTERN AIRWAYS: Offices have been opened in the Arcade Building, 401 Euclid Avenue, Cleveland, Ohio, and are headed by Alfred J. Bovier, formerly with American Airlines' Contract Air Cargo Division. Cleveland has been included as a stop on the airline's coast-to-coast cargo service. . . . Robert E. Caskey, ex-cargo sales manager for United Air Lines at Chicago and Los Angeles, has joined California Eastern as assistant to the vice president-sales.

- MATSON NAVIGATION: Non-scheduled air service between the Pacific Northwest and the Hawaiian Islands has been discontinued. One reason given is the new CAB regulations on non-scheduled operations.

- NORTHERN AIRLINES: This airline recently flew a complete night club from Seattle to Anchorage. Four DC-3s were required to do the job. . . . Arthur F. Johnstone, president, reports that nearly \$4,000,000 in Alaskan furs were flown by Northern to Seattle this season. Furs included muskrat, fox, beaver, and other pelts.

- PHILIPPINE AIR LINES: The results of Charles Wharton's eight months in the jungles of Mindanao and Luzon were a cargo of animals consisting of monkey-eating eagles with wingspreads of eight

feet; 16 cloud rats which mew like cats; a flying lemur; a dozen semi-poisonous snakes, each six feet long; eight lizards, and 31 tarsiers. Four of the lemurs died en route, high altitude (8,000 feet) given as the cause.

- SANTA FE SKYWAYS: Plans for the erection of a freight depot at the Los Angeles Municipal Airport have been announced by the airline. . . . Santa Fe has filed a motion with the CAB requesting an expedited air carrier hearing. Application for common carrier authority to transport property and mail was filed last November.

- SLICK AIRWAYS: Five more C-46 *Commandos* have been purchased, and will bring the line's fleet of air freighters to 15. The new aircraft will be put into use in the Fall. . . . Colonel Samuel C. Dunlap III, executive vice president, has resigned his office. According to Slick, he will establish his own business as an aeronautical consultant in San Antonio. . . . W. F. Rogers, former UNRRA director of transportation, has been appointed assistant to Earl F. Slick, president of the big air freight line.

- TRANSOCEAN AIR LINES: Contrary to certain published reports, Taloa will operate as many flights as possible in August and September, between England and Toronto, Ontario. Afterward, Trans Canada Air Lines will take the overflow of emigrants from England, but probably will use Taloa equipment. . . . Charles P. Hewitt has been appointed general manager of the Atlantic-European Division of the airlines. . . . Correction is made of the previous mention here of Orvis Nelson as president of Pacific Overseas Airlines. That's not so. Nelson heads Transocean Air Lines. He also holds the post of vice president of Philippine Air Lines.



Charles F. Willis, youthful president of Willis Air Service, astride one of his firm's motorcycles which are carried aboard airfreighters and used to transport crew members around fields here and in Latin America. Motorcycle weighs only 150 pounds.

IT'S AN *Air* WORLD

REG. U. S. PAT. OFF.

By L. A. GOLDSMITH, *Economic Analyst*, AIR TRANSPORTATION

VAN LEER VEREENIGTE FABRIEKEN is one of many wealthy and important Dutch manufacturing outfits doing business on a global basis. This firm produces tin cans and other containers made from tin combined with iron and steel. Its main office is in Amsterdam and the factory in Ymuiden.

Recently Mr. B. van Leer took a business trip to India, the Netherlands East Indies, China, and South Africa. There is nothing unusual about that, but what van Leer did was unusual indeed. He chartered a DC-4 from KLM Royal Dutch Airlines, and proceeded to have it converted to his own particular and specific needs.

Van Leer's purpose was to use the plane both as a home and an office while on his business travels. Thus the interior was so designed that it would be suitable and convenient to take his wife along, as well as an office staff. In other words, he needed living quarters, plus office space in which to conduct his business while en route to his various business stopovers.

H. P. Mutters, chief designer for KLM cabin interiors, handled the matter with imagination and good sense. He designed a prefabricated unit which fitted into the interior of the aircraft after the usual number of passenger seats had been removed.

This converted interior was completely air conditioned, and consisted of a lounge, offices, two bedrooms and a pantry. By using this specially designed unit, it was possible for the airline to have the use of the plane as a regular passenger aircraft until a few days prior to the departure of the van Leer contingent.

The lounge was located just aft of the pilot's compartment and was furnished with armchairs, tables, lamps, and a bar. Directly behind the lounge was van Leer's private office, which was so furnished that he could have business conferences on board the four-motored plane.

The two master bedrooms were located at the rear of the plane, as well as a small office for secretaries. There was a well-equipped pantry. The color scheme throughout was a soft beige.

A special KLM crew was selected to man the plane during its two-month business cruise. This crew consisted of a pilot, copilot, flight engineer, radio operator, and two flight stewards. In effect the van Leer party had all the comforts of a regular flight, plus the personalized service made possible for the few people aboard the plane.

After flying to England the van Leer ship proceeded to Rome, Cairo, Lydda, Basrah, Karachi, Calcutta, Rangoon, Singapore, Batavia, Hongkong, Shanghai, Hanoi, Aden, Nairobi, Johannesburg, Leopoldville, Lagos, Takoradi, Dakar, and Lisbon.

Van Leer is reported to have been so pleased with the comforts and convenience of his flying "private car" that he could not be prevailed upon to part with it. So, quite ingeniously, he figured out a way in which he could continue to use and enjoy his special interior. He purchased the fuselage of an old C-54, fitted in his special unit, and has it set up in the garden of his country home. He now has this ex-flight interior unit fitted out to serve as a kind of garden clubhouse.

AA, PAA Hit Hughes Radar

If President Truman's special Air Safety Board and the Civil Aeronautics Board direct the air lines to install Howard Hughes' radar terrain-clearance indicator, American Airlines and Pan American World Airways have indicated that they will resist that order.

According to the electronics experts of both airlines, Hughes' device is no better than the CAB-approved radio altimeters presently installed in their transports. They claim that it is "immeasurably inferior" to a new airborne radar device re-



Howard Hughes

cently announced by the Navy, jointly developed by the Navy and American. It is understood that American already has ordered this new radar for its new fleet of eight *Stratocruisers*.

Technicians stated that the Navy apparatus is "something that shows you what's in front of you and where it is instead of a gadget that rings bells and flashes lights . . . without telling you what the danger is and where it lies." Radio altimeters were used by the Army and Navy in the last war. Although a number of airlines have obtained delivery of these, shortages of materials and production delays have combined to prevent distribution to all the airlines.

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What Part Shall Freight Forwarders Have to Play?

By C. ALLEN ELGGREN

Secretary-Counsel
Challenger Airlines

ON Sept. 26, 1946, the Civil Aeronautics Board issued an order "instituting an investigation into all matters relating to and concerning services of air carriers indirectly engaged in the air transportation of property." This investigation is one of wide scope and encompasses the great freight forwarding industry. The basic purpose of the investigation is a determination as to what part the freight forwarders should play in the further development of air freight within the United States.

The Board was moved to institute this investigation for at least four reasons:

First, the Board on March 13, 1941, assumed jurisdiction over the operations of the Railway Express Company (a freight forwarder in its broadest sense) in the transportation of express, through the medium of air carriers, and issued to that company an exemption permitting it to continue to operate until the Board, through further investigation, determined whether it should be given a certificate pursuant to Section 401 (a) of the Civil Aeronautics Act of 1938 as amended. The Board has never completed its investigation relative to the issuance of such a certificate to the Railway Express Agency and the exemption order in amended form remains in effect.

Second, Universal Air Freight Corpo-

ration, organized on Sept. 16, 1940, for the purpose of extending freight forwarding operations to air transportation, began its operations on July 10, 1941. This was apparently the first incursion of a freight forwarder (other than the Railway Express Agency) into the air transport field since the passage of the Civil Aeronautics Act of 1938. On Nov. 14, 1941, Universal filed an application with the Board for authority to operate via scheduled air carriers between all States of the United States. A prehearing conference was held on this application on Jan. 26, 1942. At this point, the Board decided that an investigation of Universal's operations was in order and took no further action on the application, which is still pending before the Board. On March 9, 1942, the Board issued an order pursuant to which a hearing was held investigating Universal's existing operations. The result of this action was a cease and desist order to Universal.

Third, with the cessation of hostilities of World War II, the unparalleled expansion in air freight through the many nonscheduled operations which have sprung up, and the inauguration by the scheduled airlines of cargo flights, have stimulated a flood of applications to the Board for certificates as indirect air carriers or as forwarders by air. These are at present pending Board action.

Fourth, the Board is in possession of little or no operating data with respect to the operations proposed by the forwarders. The Railway Express Agency data which is available will not, in most instances, be applicable to the proposed



C. Allen Elggren

operations. For this reason, it is practically essential that the Board gather such information as is available on which it can make a determination.

The Board has consolidated the matter of the issuance of a Certificate of Public Convenience and Necessity to the Railway Express Agency together with the proceedings involving the numerous freight forwarder applicants and the general investigation heretofore mentioned in one proceeding. All these related matters will thus be considered together, making it possible for a review of the freight forwarding industry and its operations as they may affect air transportation before determination is made by the Board.

This article sets out the legal phases of the historical and operational developments of freight forwarding. The



ve the Development of the Air Freight Industry?

The first in a series of important and timely articles which give rise to provocative thought. The author's original paper appeared in full in The Journal of Air Commerce and Law

role of the freight forwarders in air transportation is also suggested in the light of the discussion here undertaken.

I. HISTORICAL DEVELOPMENT OF THE FREIGHT FORWARDERS

The freight forwarder has played an unheralded but important role in the development of our transportation system as we know it today. Freight forwarders have developed lucrative incomes by dealing in transportation. They are said to purchase the right of transportation at wholesale and to sell it to the public at retail.

The express companies operations are probably the better known freight forwarding operations in this country. Other operations exist which today do a greater amount of forwarding business than the express companies. These operations are known as freight forwarding in contrast to express as carried on by the express companies.

A. EXPRESS COMPANIES

1. Their Origin

The first organized forwarding agents of any consequence in America were the express companies which appeared shortly after the advent of the railroad.

Where the idea originated of performing the function of an expressman

is not known. Probably, it was first performed in America by the post rider of Colonial days, who, unofficially, for the convenience of those along his route and his own profit, carried small packages to be delivered to others living farther along his way.

As turnpikes and roads were made usable in the Colonies, the stage-driver took over this function and performed it on a larger scale. The stage-driver was a man of unquestioned reputation and honesty and to him were given commissions of great trust. Among the packages and bundles which he carried were many of great value.

When the railroads forced the stage-coaches out of existence, many of the stage-drivers were employed as conductors. In this capacity, they found it profitable to continue the service which they had hitherto performed as stage-drivers. This service was limited, however, inasmuch as the major portion of a conductor's time was devoted to his regular employment. The service was, therefore, not always satisfactory. These circumstances, together with the increasing trade and commerce within the country, created a very favorable situation for the establishment of an organized forwarding company.

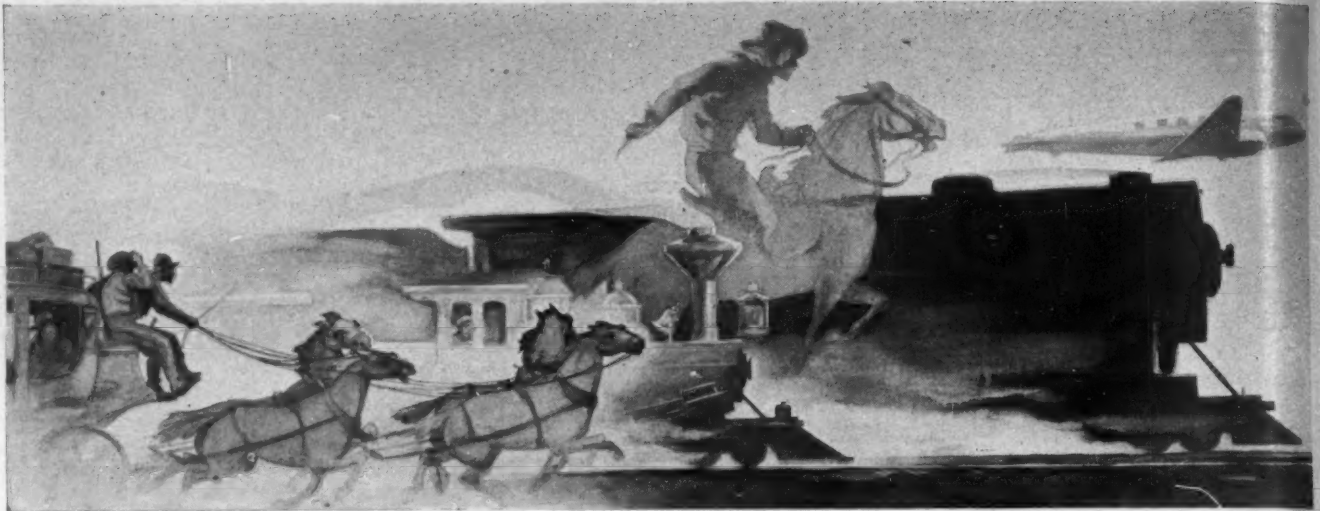
William F. Harnden of Boston is usually credited with the establishment in 1839 of the first express business, when he traveled as an ordinary passenger four times weekly, valise in hand, between Boston and New York. Others quickly discerned the profits to be derived from such an enterprise and it was not long before express companies were prospering throughout the country. Within a few short years, a consolidation of express companies was taking place and three large express companies emerged to claim certain sections of the country as zones of operations.

2. The Function of the Express Company

The function of the express company was to solicit and consolidate small package freight and other commissions for forwarding and execution with the greatest amount of expedition. Their service from the beginning was identified with passenger trains, as that was the fastest mode of transportation.

Express companies, however, did not restrict their activities to the forwarding of package freight. They were agents for the execution of every sort of commission. Their publicity slogan was "Nothing too difficult, nothing too unusual."

Today, the major function of the express company remains that of forwarding small package freight. In the performance of this function, express companies have from a very early date been held to be common carriers and liable to shippers as such. This status as common carriers has never seriously been questioned.



The author points out that the function of an expressman probably was "first performed in America by the post rider of Colonial days, who, unofficially, for the convenience of those along his route and his own profit, carried small packages to be delivered to others living farther along his way." Above is a graphic description of this development in the United States.

3. *Agreements Between Express Companies and the Railroads*

The first expressman travelled as an ordinary passenger, carrying his packages and commissions in a valise. These accommodations were soon outgrown, forcing him to make other arrangements. Special agreements with the railroads and shipping companies resulted which varied according to facilities needed, the compensation to be paid, and other general provision.

Such agreements, however, gave no guarantee of perpetuity to the express companies. Upon the giving of stipulated notice by either party, the agreements could be terminated. As a result, the express companies found themselves subject to the whims of railroads and were able to continue in existence only because the majority of the railroads found it to their advantage to farm out to the express companies their small package freight business.

The independent companies, however, were opposed by some of the railroads, and a number of railroad-sponsored express companies were successful in taking over the express business on a

few lines. Such incursions were not made without resistance. Injunctions were obtained from several federal courts denying the railroads the right to interfere with an independent express company's traffic, either directly, by termination of the agreement with such a company, or indirectly, by discriminatory rates. In 1885, the question of the right of the railroads to exclude express companies, with whom they had had contracts, from their lines and to permit railroad sponsored companies of their own choosing the exclusive use of their facilities for the shipment of express, was decided by the Supreme Court. While this decision was a legal victory for the railroads it also had the effect of establishing express companies in a legal near-monopolistic status upon the railroads of the country.

4. *Abuses and Regulation of the Express Companies*

In 1887, the railroads became subject to federal regulation with the passage of the first Interstate Commerce Act. Paragraph 1 of Section 1 of

the Interstate Commerce Act reads:

"That the provisions of this Act shall apply to any common carrier or carriers engaged in the transportation of passengers or property wholly by railroad or partly by railroad and partly by water. . . ."

In considering the applicability of this statute to the independent express companies, the Interstate Commerce Commission determined that they did not fall within the quoted definition. The Commission said at page 682 of the opinion:

"The word 'wholly' in the first section of the Act may have been used in contradistinction to the word 'partly' in the next clause—'wholly by railroad or partly by railroad and partly by water'—and not as a limitation upon the method of carriage with the meaning by railroad solely, or by railroad and not otherwise, as claimed by the express companies; nevertheless, the literal application of the word 'wholly' would exclude a great part of the business transacted by express companies, for it can be truthfully said as to the larger percentage of their shipments that they are not 'wholly by railroad' or 'partly by railroad and partly by water.' A great amount of team and messenger service is involved, as well as the use of other vehicles of transportation which are not within the language of the Act. The use of that word in a section which was evi-

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dently framed with the greatest care affords a fair foundation for the claim that the Act does not describe the mode of transportation employed by express companies with sufficient precision to bring them within its terms."

The railroad-owned express companies, however, were considered to be common carriers "engaged in the transportation of . . . property wholly by railroad . . ." The decision of the Commission apparently turned entirely on the wording "wholly by railroad." Because of the inconsistency of some express companies falling within the Act and others being left out, the Commission emphasized the need of further legislation.

There were other reasons for desiring regulation of express companies than that suggested by the Commission. The vast usefulness of the express, and the multifarious services which express companies were able to perform on a virtual monopoly scale, on a very small investment for equipment, created an enormous source of income. This prosperity and the lack of any competition created an attitude of independence among the express companies. Subject as they were to no policing by a regulating body, they found it easy to abuse their privileges as public servants. The public was forced to accept their service or go without. Complaints of discrimination

and excessive charges were frequently heard. However, in spite of this and the fact that regulation was recommended by the Interstate Commerce Commission in 1881, legislation for that purpose did not pass Congress until 1906.

Pursuant to this authority, the Interstate Commerce Commission undertook the laborious task of investigating the express companies. In its report on pages 387-388 the Commission stated:

" . . . The act also by name recognizes the express company as a carrier subject to our jurisdiction. We must therefore regard these great forwarding companies as agencies created by the railroads and recognized by law for the conduct of a certain kind of *freight business*, to which these agencies have added a service that is distinctive and peculiarly their own. . . . Our sole concern, therefore has been to discover in what regard the express companies as existing were delinquent in rendering the service which they purported to give, or which should be given under reasonable, just and non-discriminatory rates, and to discover what remedy could be applied under this law [italics added]. . . .

"The Commission has found that the complaints made against the express companies might be grouped into the following classes:

"(1) Double collection of lawful charges.

"(2) Overcharge and undercharge effecting discrimination between shippers arising out of an obscure rate system and ineffective revision and supervision of accounts.

"(3) Indirect routing of shipments by

express carrier, resulting in unreasonable delays and defeating the reason for the existence of an express service as distinguished from ordinary freight service.

"(4) Failure or refusal to deliver parcels to consignees located outside of arbitrarily established free-delivery limits without notice being given either to the consignor or consignee as to the extent of free-delivery territory.

"(5) Unreasonableness of the terms of shipment imposed by the receipt given by the carrier.

"(6) Delays in the settlement of claims for loss and damage.

"(7) Excessive insurance charges when shipments are valued at more than \$50.

"(8) A confusing set of rules governing the classification of express matter which lead to discrimination in rates between classes of shippers by providing obscure and insignificant conditions as the basis for classifications of which the initiated may take advantage to procure transportation at lower rates than the generally applied to the more uninformed portion of the public.

"(9) Delays in the return of C.O.D. collections to consignor.

"(10) The obscure statement of rates making the public dependent almost entirely upon the information furnished them by express agents.

"(11) The unreasonableness of the rates charged by the carriers."

Express companies were also found to have made huge profits by obtaining especially favorable contracts with the railroads through internal pressure of the railroad's own directors, or external pressure of financial interests allied to the express companies.



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At the conclusion of the investigation, the express companies were ordered to desist from these unlawful practices and to conform with the orders and regulations of the Commission. Since that time their profits and practices have been strictly controlled by the Commission.

The courts have recognized that the express companies became subject to the Interstate Commerce Act by the passage of the Hepburn amendment. But in recognizing express companies as common carriers subject to that Act, the United States Supreme Court has distinguished between them and "carriers by railroad" for purposes of regulation under some sections of the Act. Thus, it was held, that the term "carrier by railroad," in Section 15 (4) of Part I did not include express companies, but that the term meant one who "operates a railroad, not one whose shipments are carried by a railroad." The Court further said that the language used in that section "describes aptly a single railroad system, but not a system of express routes extending over many railroad systems." The Supreme Court further held that the phrase "common carrier by railroad" used in the Employers' Liability Act did not include express companies.

The coverage of the Hepburn Act over express companies was held not to extend to operations of other than "the transportation of property wholly by railroad, or partly by railroad and partly by water," and not to "express companies handling property by truck, airplane, or other method of transportation not invoking rail service." The specific question involved in the latter case was whether the wholly owned subsidiary of the Railway Express Agency, the Railway Express Motor Transport, which engaged in motor truck operations in competition with other motor truck operators, was subject to Part I of the Interstate Commerce Act.

The enactment of the Motor Carrier



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Act in 1935 raised the question of the status of express companies under that legislation. On February 11, 1936, the Railway Express Agency filed an application for a determination of whether the provisions of the Motor Carrier Act applied "to any or all of its operations in connection with the transportation of property by motor vehicle, in interstate or foreign commerce, with particular reference to the definition of a common carrier by motor vehicle in Section 203 (a) (14) of that Act, which includes the 'motor vehicle operations of carriers by rail or water, and of express or forwarding companies, except to the extent that these operations are subject to the provisions of Part I.'"

Division 5 of the Commission found the motor vehicle operation of the Railway Express Agency to be subject to the jurisdiction of the Commission under the Motor Carrier Act with the exception of those associated with the pick-up and delivery of express package shipped wholly by railroads or partly by railroad and partly by water for which no additional charge is made by the shipper, those incidental to transportation by aircraft, and those where pick-up and delivery service within a terminal service is rendered a railroad.

5. The Express Company Today

With the entrance of the United States in the War in 1917 and the taking over of the railroads by the Government, the express companies found themselves in an almost impossible position. They were happy, therefore, when the Government took them under its control and consolidated them into one system, the Consolidated Express Company, which name was changed later to American Railway Express Company.

At the close of the war, none of the old companies wished to take back its business. Consequently, the express business continued as the American Railway Express Company under private control.

On March 1, 1929, a company created by the railroads themselves took over the business of the American Railway Express. The result is the Railway Express Agency of today. With the advent of the motor truck, the Railway Express Agency has progressively made use of that medium of transportation in the performance of its operations, and, in at least one instance, as heretofore indicated, has undertaken direct motor carrier operations.

(Continued in Next Issue)

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[REG. U. S. PAT. OFF.]

THAT heralded 25 percent cut in the domestic scheduled airlines' air freight rates became a thing of fact at the beginning of the month. The new tariff provides shippers with more than 7,500 joint rates and routings over the 19 participating airlines. Generally based on 26½ cents per ton-mile, the prevailing rates fall to 20 cents per ton-mile, with a spread ranging from 33 cents per ton-mile for small packages moving short distances to 14 cents for planeloads of 16,000 pounds.

Previously a 100-pound shipment between New York and Los Angeles cost \$33.60; the new rate is \$25. A shipment of the same weight between New York and Chicago previously cost \$10.70; today it is \$8. A 25-pound shipment between Washington and Denver, previously costing \$5.47, is now \$4.06.

Also effective are two additional tariffs, one embracing rules and regulations for the handling of air freight on a nationwide basis, and the other listing pickup and delivery service at more than 2,150 points in 45 states. Air Cargo, Inc., has sent out copies of the new tariffs to some 20,000 shippers.

There have been a number of reactions to the new tariffs from various sources. One claims that the lower air freight rate will not affect the regular rail business but will take a healthy swipe at the air express business. It was said that an additional reduction in the air freight rates of about 50 percent would divert a portion of the railroads' lcl business which has not been profitable for the railroads.

Meanwhile, some of the non-scheduled airlines are reported to have been eyeing the slash with anxiety. This, naturally, would be the state of mind of the smaller lines who have not only the major scheduled lines to contend with, but also such air freight carriers as Slick, California Eastern, The Flying Tigers, and a few others.

Railway Express Agency reports that it has signed an international air express agreement with Eastern Air Lines whereby REA will handle all overseas and international air express shipments to San Juan, Puerto Rico, and another one with TACA serving more than 70 cities in Cuba, Central America, Mexico, and the Canal Zone.

New customs regulations which would expedite handling of air shipments to Venezuela have been established by that Government. Part and parcel of the new setup there is Caracas' new customs house. Instead of the agonizing delays at Maiquetia Airport, shipments are now taken directly to the capital for clearance.

Pilots or agents of commercial air transports are now required to file duplicate descriptions of their planes with the Venezuelan consul nearest the port of embarkation. Fee is 10 bolivars. One of these copies is returned by the consul, forwarding the second to the Venezuelan Comptroller General together with other shipping documents.

Five copies of a customs declaration covering the merchandise to be shipped are made out by the shipper. This form includes general data: names and addresses of the shipper and consignee, date and place of shipment, Venezuelan destination, airline, enumeration and description of each package and its contents, and the goods' country of origin. Any language will do in filling these forms, but it must be translated into Spanish by the interpreters in the customs without intervention by the Venezuelan consul. Two copies are turned over to the pilot or agent by the shipper. One of these must be enclosed in an envelope sent to the customs together with the general shipping guide for the merchandise. The balance of three copies should be sent to the consignee.

The general guide (made out in quadruplicate by the pilot) requires no certification by the consul. The following information should appear: class, nationality, and name of plane and pilot; port of

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embarkation; destination; name of shipper and consignee; enumeration, trademarks, and weight of each package; total number of packages and total weights spelled out and in figures.

There are also provisions for the signing of forms by pilots for transshipments. The Venezuelan consul will send all documents necessary to cover the shipment and the pilot's declaration to the examination room of the General Comptroller. When he lands, the pilot must present his declarations of merchandise carried to the Customs Administrator.

Newsworthy is Northwest Airlines' air express agreement with REA for the handling of shipments to the Orient. Last month NWA inaugurated regular thrice-weekly service to the Far East. Shipments now may be sent via NWA to Anchorage, Tokyo, Seoul, Manila, and Shanghai.

REA is handling all the paper work for the shippers on cargo for the Orient, as well as handling customs formalities on shipments coming into this country from the Far East. Rate is \$1.80 a pound for air express shipments to the Orient.

A through airwaybill which will cover shipments from any airport in the United States served by a scheduled carrier to any point overseas served by an American or foreign airline will be made available soon. Shippers have been waiting for this for a long time.

Air freight rate cuts being the vogue these days, British Overseas Airways Corporation has come through with a transatlantic tariff all of its own. Shippers of heavy cargo benefit from slashes as high as 33 percent on the New York-London run, and sometimes as high as 40 percent on the Baltimore-Bermuda route.

From New York to Newfoundland the rate for cargo under 100 pounds is 38 cents per pound, and 27 cents per pound for cargo over 100 pounds; to Shannon, \$1.06 per pound under 100 pounds, and 70 cents per pound over 100 pounds; to Prestwick, \$1.11 per pound and 73 cents per pound; and to London, \$1.17 per pound and 77 cents per pound.

BOAC states that "the reduction does not benefit the shipper of more than 100 pounds," explaining that "the maximum charge for a shipment under 100 pounds will not exceed the charge for a shipment over 100 pounds." The British airline added that it would "also apply on the Baltimore-Bermuda route, which will carry freight under 100 pounds at 25 cents per pound

and freight over 100 pounds at 15 cents per pound."

A frequent forwarder of ships' papers via BOAC is the New York shipping company, States Marine Corporation. This has its great advantages, giving the overseas shipping staff an opportunity of making early arrangements for the handling of incoming freight. In addition, it gives the foreign importer several days to plan his allocations and deliveries of cargo aboard the slower-moving vessel. And, as BOAC puts it: "It also gives the New York shipping company the advantage of a 'second guess' on instructions involving thousands of items of freight without running up hundreds of dollars worth of cable tolls."

One recent cargo oddity aboard a BOAC plane was a drug known as estradol benzoate, weighing only five pounds, and valued at \$20,100. Freight charge?—\$5.85!

Here's a smart wire sent to 100 accounts (foreign freight forwarders and exporters) by TWA's general sales manager, W. F. McGrath: "Ship direct, avoid delay by TWA all-cargo Skycargo service to Europe, Africa, Middle East, and India. Guarantee faster delivery with through flights, no off-loading. Eight thousand pounds maximum single shipment. Remember, for surer, swifter service ship TWA Skycargo." Results, says the airline, were favorable.

Pan Am has inaugurated a weekly all-air cargo service between San Francisco and Manila. Flights leave Frisco on Fridays, arriving in Manila on Mondays after stops in Honolulu, Midway, Wake, and Guam. Return flights leave Manila every Tuesday, arriving at Frisco on Wednesday.

The airline's Latin American division recently transported five top-flight (no pun meant) race horses from Buenos Aires and Rio de Janeiro to New York. Distance of 5,295 miles was covered in some 40 hours by four of the horses; the fifth was picked up at Rio.

According to the Bureau of the Census, LaGuardia field led all airports in value and was second in shipping weight of both exports and imports by air, during the month of February. Exports totaled \$4,597,000 and 230 tons and imports \$4,548,000 and 47½ tons. Miami led in shipping weight and was second in air export and import value. Air exports through Miami totaled \$4,585,000 and 635½ tons, and imports \$531,000 and 285½ tons. Shipping weight and value of merchandise

FOREIGN TRADE OF PRINCIPAL AIRPORTS - FEBRUARY 1947

Value of Exports by Air		
Airport	Thousands of dollars	Percent of total
TOTAL.....	12,431	100
La Guardia Field	4,597	37
Miami.....	4,585	37
San Antonio....	696	6
Brownsville....	597	5
San Francisco..	194	2
Oakland.....	189	2
Houston.....	186	1
New Orleans....	164	1
Other.....	1,223	9

Value of Imports by Air		
Airport	Thousands of dollars	Percent of total
TOTAL.....	5,909	100
La Guardia Field	4,548	77
Miami.....	531	9
San Antonio....	123	2
San Francisco..	114	2
St. Petersburg.	109	2
Chicago.....	88	1
Washington, D.C.	82	1
El Paso.....	78	1
Other.....	236	5

Shipping Weight of Exports by Air		
Airport	Thousands of pounds	Percent of total
TOTAL.....	2,600	100
Miami.....	1,271	49
La Guardia Field	460	18
San Antonio....	193	7
Brownsville....	104	4
New Orleans....	92	4
St. Petersburg.	80	3
San Juan.....	45	2
Newark.....	45	2
Other.....	310	11

Shipping Weight of Imports by Air		
Airport	Thousands of pounds	Percent of total
TOTAL.....	984	100
Miami.....	571	58
La Guardia Field	95	10
St. Petersburg.	64	7
West Palm Beach	51	5
San Juan.....	48	5
Key West.....	29	3
Niagara Falls..	17	2
San Diego.....	14	1
Other.....	95	9

declined eight and 12 percent respectively from the previous month.



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AIR FREIGHT FORWARDERS

In which the AFA attacks the scheduled airlines' air freight tariffs, a Cal Eastern official supports the forwarders and REA, and some odds and ends concerning this new industry are noted

THE scheduled airlines' Air Freight Tariffs 1, 2, and 3 came in for a round of heavy criticism when, two weeks before the effective date (August 1), a petition signed by Allen Dean, president of the Airfreight Forwarders Association, asked the Civil Aeronautics Board to "revoke the special tariff permission and suspend the . . . tariffs in their entirety, enter upon an investigation, and set the matter down for hearing." The AFA protest spoke for 23 air freight forwarding firms, all members of the recently organized group.

Using vigorous language, the petition called for a CAB investigation of the "lawfulness of the rates, charges, rules and regulations contained therein," and after this investigation "the Board find such rates, charges, rules and regulations unlawful and order their cancellation, or in the alternative prescribe lawful rates and charges and rules and regulations."

It attacked Air Cargo, Inc. for establishing a like rate for shipments of 100 pounds as that for 15,999 pounds, stating that it ignored the "long-recognized transportation economics that it costs relatively less to handle volume shipments than it does smaller shipments." The AFA also hit the scheduled airlines' failure "to provide a lawful rate for either a DC-3 or a DC-4 which constitute the carrying vehicles of the airlines for whom rates are published."

At one point the AFA contended that "the rate structure in question (above 100 pounds) was designed and published for the primary purpose of destroying the opportunity for air freight forwarders to use the services of scheduled airlines," because it dovetails with "the position of the airlines as revealed



Allen Dean
AFA Head

in the Freight Forwarder Case, CAB Docket No. 681." The scheduled airlines are on record as being opposed to certification of air freight forwarders.

Text of Petition

Following is the text of the AFA petition:

"1. The said tariffs violate well-established transportation principles for the protection and benefit of shippers as well as the members of petitioner's association and are unjust, unreasonable, preferential and discriminatory in that:

"(a) The same rate per 100 pounds will be assessed the shipping public for shipping 15,999 pounds as will be exacted for carrying a mere 100 pounds. Not only does this ignore long-recognized transportation economics that it costs relatively less to handle volume shipments than it does

smaller shipments, but it fails utterly to provide a lawful rate for either a DC-3 or a DC-4 which constitute the carrying vehicles of the airlines for whom the rates are published.

"It is common knowledge that a DC-3 will carry about 7,000 pounds under average conditions. The airlines in question are today handling as little as 5,000 pounds as payload lots. The DC-4 will carry about 14,000 pounds under the same ideal conditions. A spokesman for Air Transport Command states 9,500 pounds would be a fair average for their use of the C-54, the Army's version of the DC-4. But even if that load were increased 40 percent—14,000 pounds—the rate is still the same as on a 100-pound bag or box.

"Further, surface carriers have always followed the principle of making minimum weights fit commercial use, commensurate with the vehicle, and general cost aspects. It is completely unrealistic to make the maximum capacity of the biggest freight airplane presently operated the commercial unit that the shipping public must conform to in order to escape paying the relatively high rate that applies for 100 pounds. This is the effect of publishing the 16,000-pound basis as the rate-break point. For example, the Detroit-Los Angeles rate is \$20 per 100 pounds except on a 16,000 pound shipment, when it would reduce to \$14 per 100 pounds.

"Another practical effect of the rates is to deny to many important but small cities the opportunity of obtaining payload rates. How often will Anderson-Muncie-New Castle industries attract a 16,000 pound shipment? When can Enid, Oklahoma, or Valdosta, Georgia, look forward to receiving a giant four-engine ship packed to the ceiling with freight whose density will permit a full 16,000 payload in the cubic area available? But those same cities and many others smaller and larger will have industries that quite often will have 5,000 pounds or 7,000 pounds and are entitled to be accorded a payload charge instead of the unreasonably high charge predicated on 100-pound shipments.

"Whatever plans there may be for the use of different equipment, the fact is that two-thirds of the cargo capacity operated by the scheduled airlines is with DC-3

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equipment.¹ In addition, the average loads of several of the forwarders for whom petitioner speaks have been running between 3,000 and 4,000 pounds, indicating that there were many shipments of larger volume.

"In order to protect and benefit shippers, so-called carload rates have always been established at a point somewhat less than the capacity of the vehicle. This should be especially true in air transportation where the space limitations are peculiar and where density of the shipments is especially important. This would mean that breaks at not less than 5,000 pounds and 14,000 pounds, should be provided. The ICC has several times found rates unlawful that were based upon minimum weights beyond the carrying capacity of the vehicles operated.

"(b) If the present rates were constructed on a logical, reasonable, and legal basis, then some reason should be forthcoming for completely abandoning the present system of reducing the rate in accordance with the volume offered (above 100 pounds). The new rates provide the same rate per 100 pounds at any given mileage as prevails on 15,999 pounds. This is directly contrary to the rate structure both at present and in the new tariff on quantities of 25 pounds to 99 pounds. In the 25-99-pound group the charges per pound are allowed to fall sharply as the size of the shipment increases. The doctrine of "greater volume-lower cost" is applied on the small quantities where the scheduled airlines already control the traffic and abandoned on the traffic where the non-certificated cargo carriers are predominant. The much publicized "rate war between scheduled airlines and air freight carriers" as announced by the press, is presumably based upon airline press releases. It completely fizzles out upon analysis of the actual rate reductions published . . .

"The rate for scale No. 39 (Detroit-Los Angeles) is \$20 per 100 pounds. It is the same for 15,999 pounds. If it is correct and lawful as to the 100-pound shipment, it is unreasonable and unlawful as to the 15,999 pound shipment. At what weight between 100 pounds and 15,999 pounds the point of lawfulness begins or ends is a matter of proof that only the carriers can fully know. But, it requires no great student of transportation to judge that a rate which is the same in all reaches of the weight scale cannot fit the tests of freedom from unreasonableness, preference, and prejudice which Congress requires of the regulated airlines under the Civil Aeronautics Act.

¹ In May 1947, 998 aircraft-days were operated by DC-3s, and 271 by DC-4s.



Max Shellabarger (sitting in tractor) is so gone on air transportation that he recently employed Alaska Airlines to fly his farm 70 miles from Anchorage to Skwentna. All his livestock and equipment were loaded into this DC-3 at Elmendorf Field. Included in this unusual cargo were a cow, calf, two pigs, a two-bottom plow, six-foot power mower, the largest wheeled tractor made by Allis-Chalmers, two sections of spike-toothed harrow from Lomen Equipment, Diesel oil and grease, sacks of food and seed, and a sewing machine. When the loading was completed, Shellsbarger drove from Elmendorf to Merrill Field where he picked up his private plane and followed the DC-3's tail to Skwentna.

"(c) Substantial increases are provided in the area between 3,000 pounds and 16,000 pounds. At 150 miles the rate on 3,000 pounds would be increased from \$2.04 per 100 pounds for a 3,000-pound shipment to \$2.15 per 100 pounds. The difference becomes progressively greater as the weight increases. This is the area where the non-certificated cargo carriers are most effective and yet the present rates are already substantially higher than competitive rates.

"If the scheduled airlines intend to compete for this traffic by resorting to the figment of "contract" operation and to abandon use of the tariffs in quoting charges to the shipping public, this should be known to the Board. The Board should exercise its jurisdiction to determine the economics of a complete abandonment of the former system of constructing rate scales and charges and an abandonment of the volume cargo potential as a result of the non-competitive and uneconomic rates proposed.

"The proposed tariff, according to public statement, was to provide the means of effectively competing for volume cargo. Yet in the area of volume shipments where the scheduled airlines have carried less than one percent of their freight volumes, rates are proposed to be substantially increased. If Air Cargo (Air Cargo, Inc.) is to be the instrument through which the airlines enter into competition with Railway Express for the "under-arm packages," and if they are abandoning the volume market, the Board is entitled to information more reliable than has been given to the press. Actually, the 16,000-pound rate, both at present and in the proposed rates, is a "paper" rate which has not developed any traffic, and will not, especially since it applies on only half the airlines. Such well-known carriers as Northwest, Eastern, and Braniff are not included. Because of the requests for increased mail pay and subsidy from a very large section of the industry, the Board should carefully review this feature of the proposed rates to see whether the result

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may be reasonably economic.

"2. Four reasons have been advanced for special tariff permission:

"(a) Cost of printing supplements, etc.

"(b) Changes in power of attorneys will have to be refiled.

"(c) Publicity has led shippers to expect 'reductions.'

"(d) Employee training programs.

"These are so unsubstantial as to hardly require comment. If these reasons justify special permission, then no rate filing, no matter how important, could ever be suspended. Certainly, these items become insignificant when weighed against the tremendously important interests of the shippers. Certainly shippers know that press releases are not rates—the expenses and difficulties referred to in the other paragraphs of the request are without substance.

"Undoubtedly the airlines in the fairly near future will be hauling a very great amount of the freight moving by air. These artificial exigencies should not be the excuse for allowing an unsound structure to be established.

"3. The said tariff violates Economic Regulation 224.1 and especially Paragraph D-2 (d) thereof which requires that below the name of the agent should appear the name, title and address of the person issuing the tariff. To include the name of an organization not issuing or concurring in the tariff, such as Air Cargo Inc., is a clear violation of the said rule, and is misleading since the names of the actual participants in the tariff are listed only on an inside page.

"4. Although the rates established in the tariff are common to practically all of the airlines and are obviously the result of an agreement among the carriers, no application for an approval of such agreement has been filed under Sec. 412 of the Act. Since the rate-making power of the individual airlines was never surrendered to Air Cargo Inc., the establishment of the proposed rates must have resulted from concert of action by the carriers and is contrary to the public interest in the absence of approval by the Board.

"5. It is the contention of this petitioner that the rate structure in question (above 100 pounds) was designed and published for the primary purpose of destroying the opportunity for air freight forwarders to use the services of scheduled airlines. We say that because it fits the position of the airlines as revealed in the Freight Forwarder Case, CAB Docket No. 681.

"But whatever the intent, the actual effect will be different and more far-reaching than has been mentioned publicly or privately. As a matter of fact, the new rates

between 25-99 pounds actually accord a greater spread to the forwarder than heretofore. This difference, while 100 percent greater in some instances, still is of little practical benefit to a forwarder or a shipper who consolidates. At the same time the 3,000-15,999-pound shipment suffers actual increase in charges and in ton-mile expense to shippers.

"6. Petitioner speaks directly for only its members. Indirectly it speaks for hundreds of shippers for whom it arranges air freight transportation. But beyond the realm for whom petitioner might qualify to be heard, there is the general shipping public who probably does not realize that with these new rates there is being established the pattern of scheduled airline freight rates for years to come.

"However puny may be the volume of air freight now carried by those airlines, over the years ahead when these rate patterns will still prevail—unless the Board examines into them now—there will be a volume of unlawful air freight charges exacted from the public which will do substantial injury to the public.

"The place the scheduled airlines take in developing air freight depends upon the statesmanship with which they tailor their charges and services to fit the needs of commerce. Certainly, the public may expect them to dominate the freight field as they have the passenger field, since in most other forms of transportation the common carriers are preeminent.

"7. Petitioner realizes that the result of suspending the said tariff will be to deny to the shipping public certain decreases in rates effective August 1. This will probably be raised as an excuse as to why the whole revolution in air freight tariff structure should be jammed through despite objections.

"For this reason the Board might well permit only the decreases in rates and withhold the proposed increases. It might even flag the decreases to become effective for only a trial period, during which the lawfulness thereof might be inquired into.

"At all costs, the important function of the Board in fulfillment of its duty to the shipping public is to prevent this kind of rate structure from becoming permanent, thus denying logical, lawful and useful rates to the shipping public.

"Wherefore petitioner requests that the Civil Aeronautics Board revoke the special tariff permission and suspend the application of the aforementioned tariffs in their entirety, enter upon an investigation, and set the matter down for hearing, wherein the parties thereto shall be required to assume the burden of justifying the lawfulness of the said tariff, and following such

investigation, find such tariffs unlawful and order their cancellation."

Haney Testimony

Meanwhile, strong support for the Railway Express Agency and freight forwarders and consolidators in their application before the Civil Aeronautics Board was given by the regional vice president of one of the larger contract carriers, George J. Haney, of California Eastern Airways. Although he pointed out that he spoke solely for his company, Haney, in his testimony before Examiner Earl J. Cox, stated that many other independent air freight carriers shared his feelings.



George J. Haney
Testifies before Cox

"We feel," Haney testified in reference to handling of general shipments from the public, "that from a cost factor, from a ground handling factor, and from an economical factor—and because we are interested in offering the public as low rates as possible—that the best method of handling that type of freight is through a forwarder or agency or in whatever manner that freight can be

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consolidated together into large shipments."

The certification of REA or the freight forwarder would not lead to their domination of the independent carriers, Haney asserted, stating:

"We do not feel that the certification of the Railway Express Agency or the certification of these forwarders will eliminate any great sales effort on our part. For instance—if the Railway Express Agency were certificated in this proceeding I am quite certain that we would retain the great volume of business that we presently have within the large terminal cities because we could out-compete the Railway Express Agency on price alone."

He added that certification of the forwarders and Railway Express would likely bring in large volumes of off-line points business which cannot be handled by the independent carrier.

Speaking of forwarders Haney asserted that "they can give a certain type of service to a shipper which we cannot afford. If they can clear papers and expedite shipments in a manner that the general public is better served, why we certainly feel that we should deal with these forwarders. We sincerely feel that in many cases the forwarders can offer a better service than we can."

"We feel that the Railway Express Agency in many cases, from a selfish standpoint of the carrier, can give us business which we can't touch today and which we don't feel we can touch for years because of the tremendous sales solicitation force it would take to do so," he said.

In rebuttal to argument that over-the-road-truckers could provide off-line service Haney testified:

"We find the off-line truckers—the over-the-road truckers—as a matter of fact are not interested to a great extent in the air business at the present time. The volume of air business at this time is not sufficient to warrant their being interested in it. It would be too costly for them to handle, and their service is

not geared at the present to handle an interline agreement with an airline."

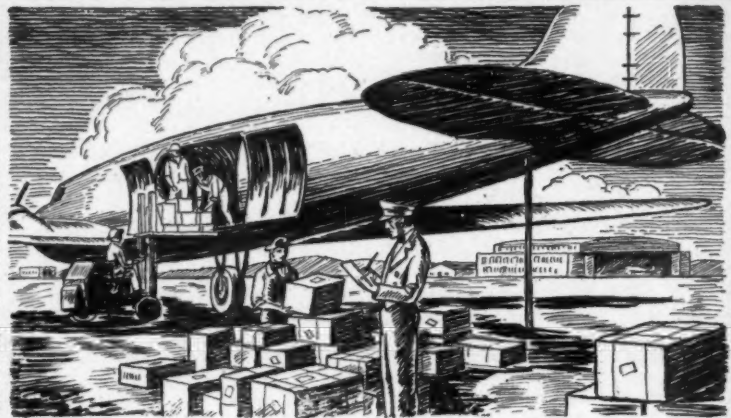
He added that the truckers felt it would be quite a few years before such an arrangement would be practical, although all feel that there is a great future in it. In his own opinion, it will take 10 years to develop adequate service with over-the-road truckers. Meanwhile, he said, granting of the application of the forwarders and Railway Express will offer the public a service which will generate a large volume of business for air carriers.

Other industry developments are:

- Harry A. Bowen, former public coun-

sel for the CAB, has been appointed general counsel of the AFA. He is a graduate of the University of Washington Law School (1936); served as deputy prosecutor of King County, Seattle up to 1940; and held the post of assistant attorney general, State of Washington, to 1943. While handling public utility rate cases for the State of Washington, he was retained by the former Office of Price Administration to represent that body in cases throughout the country where utilities sought to increase charges. In September, 1943, Bowen left the OPA to join the CAB where he worked in both the new route and rate sections of the general counsel's office.

• Announcement of lowered rates has been made by Federal Air Freight and
(Concluded on Page 38)



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By JOHN F. BUDD, JR.

TWELVE years ago the airline traffic men in Washington burned the midnight candles, scheming ways to get the government passengers from each other. Offers of free rides, or quarter or even a half off the regular tariff, were dangled before the eyes of the Government people. Today, to quote an old saw, "times have changed." The lawmakers now come to the airlines, stopping even to recognize the importance of the "little-people"—the salesmen and women. For, since October, '45, a number of wearers of the striped pants and cutaway have paused in their committee labors long enough to address the Airlines Traffic Association there.

This Washington counterpart of the Airlines Traffic Club of New York was at first headed by James B. Ford, Jr., of Capital Airlines, with Edward Peterson of Eastern backing him as vice president. Helen Snelling of Braniff, was secretary. They were all airline sales representatives, and the membership, now totaling over 50, was composed exclusively of outside salesmen and women. Gathering on the last Monday of the month, the members soon came to know each other, and learned to their surprise that the chap from that other line had run up against the same sort of sales resistance which they, them-

selves, experienced. The spirit of fellowship took hold and attentions were turned to the more serious side of the venture.

After a fine start, it was unfortunate that its first president should be transferred before he could see his efforts blossom fully. Now DTM at Akron, Ford optimistically plans on organizing a similar club in that neighborhood. Meanwhile, back in Washington, Ed Peterson has moved up to succeed him, with Reg Martine of American the new vice president. Marge Hunter of Northwest, who somewhere along the line had become secretary-treasurer, has left the Washington scene; Jane Beam, representing Capital, now holds down this post.

Naturally an organization dedicated to extolling the industry's better qualities would not be complete without a couple of tub-thumpers of their own. The Airlines Traffic Association has just that in the persons of Ted Kellog, United, and De Witt Ballew, Jr., Eastern. They head the publicity committee as co-chairmen.

Incidentally, it would be well for the New York group to keep a wary eye turned in the direction of the Potomac, for the Washington organization has pushed ahead fast.

Stratocruiser in the Air

Sixty-seven-and-a-half tons of plane—the Boeing Stratocruiser, which, when delivered, will be the biggest and fastest transport in the world—successfully completed its maiden flight last month. Built to cruise at 340 miles an hour, the ship, using partial power, averaged 260 miles an hour during its hour and 24 minutes aloft. It reached an altitude of 11,000 feet on that flight.

The double-decker, which will provide



Boeing Stratocruiser
Flight-Tested

luxurious accommodations for four-score passengers, has been ordered by Pan American, Northwest, American Overseas, United, British Overseas, and Scandinavian. It is 110 feet and four inches long, and has a wingspan of 141 feet, 3 inches.

22 TWA Transatlantic Flights

Trans World Airline has accelerated its transatlantic service, increasing Summer runs to Europe and the Middle East from 18 to 22 round-trips a week. New York is the terminal on the four new trips. Boston has been added as a stop on the regular Wednesday New York-Paris flight. Overseas points receiving increased TWA service are Paris, Rome, Cairo, Jerusalem, Dhahran, and Bombay.

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★ EXECUTIVE ★

JAMES A. WOOTEN, elected president of Alaska Airlines. A well-known air freight man, Wooten's last position was with American Airlines where he headed the Contract Air Cargo Division.

RICHARD W. MILLAR and **CLAUDE N. MONSON**, now serving as chairman of Northrop Aircraft's board of directors and vice president-general manager respectively. Millar has been a director of Douglas Aircraft and president of Vultee Aircraft; Monson has been with Northrop since the early Thirties when he was a helper in the sheet metal department.

FREDERICK B. COLLINS and **EDWARD C. WELLS**, elected vice presidents of the Boeing Airplane Company and the Boeing Aircraft Company. Collins has served as sales manager for nine years, joining Boeing in 1927; Wells has been with Boeing since 1931 and was named chief engineer in 1931.

H. DANFORTH STARR, elected secretary-treasurer of American Overseas Airlines. Starr has been with AOA, then American Export Airlines, since early 1944. Prior to that he served as a director and assistant to the president of Northeast Airlines, and earlier was affiliated with National Aviation Corporation.

WILLIAM J. HOGAN, named treasurer and senior financial officer of Ameri-

can Airlines. He is a former treasurer-comptroller of the H. J. Heins Company.

WESLEY J. WILSON, formerly general traffic manager of TACA and before that a traffic manager for Pan American, appointed vice president and general manager of World Travels, Inc. He has a background of 27 years in the transportation business.

NED SHOTT, named executive vice president and general manager of Air Cargo Transport. An AAF veteran, he recently held the post of manager of the Air Transportation Division, Circulation Department, *New York Times*.

B. ALLISON GILLIES, member of the aviation consultants firm of Jones and Gillies, elected a member of the board of directors of Slick Airways.

FREDERICK G. BETTS, appointed assistant to the president of TWA. A veteran of 19 years' service with the airline, Betts held the rank of colonel in the AAF, serving as chief of staff for General Doolittle's Eighth Fighter Command in Belgium.

VICTOR A. KROPFF, named assistant to the president of Mid-Continent Airlines. He was associated with Pan American for a dozen years, holding the post of Alaska Division traffic manager from 1938 to 1946.

GEORGE K. HARRIS, former superintendent of stations, appointed assistant to

the vice president-operations. Harris previously spent seven years with Braniff and during the war served with the ATC.

★ SALES TRAFFIC ★

TOM M. MILLER, elevated to the position of general traffic manager for Chicago and Southern Air Lines. He joined C & S nearly four years ago and has moved up the line several times. A Texan, Miller is a graduate of Houston Law School and a member of the Texas Bar.

ARTHUR C. DOYLE, named sales manager of Colonial Airlines. Doyle previously served as United States sales manager for Pan American, holding this post for eight years. He is a Navy veteran of World War I.

CARROLL LITTLE, appointed Northern Region reservations manager for Braniff International Airways. He has been with Braniff for 10 years.

JAMES P. FARRELL, **WARREN LEROY**, **HOWARD WEST**, and **JAMES SPEER**, now serving Northwest Airlines in the following district traffic managerships: Farrell, Shanghai; LeRoy, New York; West, Great Falls; and Speer, Portland, Oregon. Farrell formerly served Eastern Air Lines for five years, and was New York district traffic manager for NWA. LeRoy, who has been with NWA since 1939, was moved to his new job from Great Falls. West has moved into the job vacated by LeRoy. Speer, who has been with Douglas Aircraft and American Overseas, recently was NWA's district traffic manager at Detroit.

WILLIAM W. MARSH and **ROBERT B. SMITH**, new district traffic manager for Western Air Lines at Portland, Oregon, and Seattle, respectively. Both are Navy veterans, Smith having served with the NATS.

ORLAND J. RIDENOUR, **J. J. HOLLYWOOD**, **JOHN A. SWANSON**, **THOMAS P. GILROY**, **ANDREW G. DIDDEL**, and **WAYNE B. GLASGOW**,



Frederick G. Betts

Tom M. Miller

Arthur C. Doyle

R. L. Griffith

Thomas J. Harris

Herbert J. Lyell

named to the following traffic and sales managements by Eastern Air Lines: Ride-nour, San Antonio; Hollywood, Akron; Swanson, Corpus Christi; Gilroy, Charleston, South Carolina; Diddel, Louisville; and Glasgow, Nashville.

CHARLES A. GLOVER, JR., LOUIS CALTA, and **R. J. CURRIE**, appointed to the following assistant traffic and sales managements by EAL; Glover, Atlanta; Calta, Washington, D. C.; Currie, Detroit.

WARREN WOODWARD, now serving as regional traffic manager for Pioneer Air Lines, with headquarters in Austin. He is an Eighth Air Force veteran.

ROBERT M. STEVENS, appointed director of sales promotion for Southwest Airways' general traffic manager. He was an AAF flier.

★ CARGO ★

R. L. GRIFFITH, assistant secretary of American Airlines, appointed general manager of the Contract Air Cargo Division. He will be responsible for the merging of CACD into the common carrier operation of AA.

THOMAS J. HARRIS, formerly New York cargo sales manager for American, named European cargo sales manager for American Overseas. Previously associated with Marshall Field and Company in Chicago, he joined AA in 1938. He is a

graduate of Northwestern University and during the war served with the Naval Air Corps as lieutenant commander.

JOHN H. KONRATH, JR., appointed by Alltransport, Inc., to head its newly organized Air Express Department. Konrath previously was associated with California Eastern Airways; Gulf Oil Corporation, where he served as air traffic manager; and with the National American Wholesale Lumber Dealers Association, holding the post of assistant traffic manager.

★ MISCELLANEOUS ★

HERBERT J. LYALL, who succeeds **JOHN F. BUDD** as chairman of the Aviation Section, New York Board of Trade. An American Airlines executive, Lyall is a member of the Wings Club, Advertising Club, and Seales Executive Club, as well as a director of the Airlines Terminal. In accepting the chairmanship from Budd, publisher of *AIR TRANSPORTATION* and founder of the Section, Lyall stated that his predecessor had made "an important contribution to the business life of the aviation industry in New York." Budd now holds the post of honorary chairman.

WILLIAM M. SCHWARZ, named by the Port of New York Authority to the important post of chief of the Scheduled Air Transport Division. Schwarz formerly was employed by TWA in its Airways Engineering Department.

The Why and How of Air Cargo Terminals

(Continued from Page 16)

(5) Additional space for the handling of smaller and feeder aircraft.

(b) A special truck road should convey traffic over the shortest possible distance to the cargo terminal from the city, avoiding the passenger car traffic.

(c) A tunnel equipped with overhead conveyor movement for the towing of small dollies between freight terminals and passenger ramps should be provided for the fill-in freight for passenger craft. Such a tunnel, which undoubtedly could be built at low expense, would save approximately \$2 for each landing or take-off. Figuring on 700 landings, alone, it seems evident that this investment could be amortized in a short time.

(d) Inside the freight station, cargo should be handled and processed from

trucks over belt conveyors. Afterwards, freight should be stored and moved on dollies only, which could serve as cargo carts for the movement through the tunnel as well as to cargo aircraft.

(e) Precooled air, heat and electric power for the operation of aircraft's own lighting system to be provided on the loading base and on the parking space. In addition, an underground fuel system would allow gassing at the same time as loading.

(f) The greatest problems are confined to the loading base where the airport cargo capacity will be determined. To serve all types of aircraft and to provide for reasonable adjustment for future needs, elevator platforms should be required as fixed installation for each cargo base installation. With an individual elevating capacity of 30,000

pounds, these elevators could be used as well for the lifting of entire trailers and truck loads. To allow the aircraft to move into position and to clear the bay under its own power, the loading platform should be installed underground. No tractor would be needed to place the aircraft in position. A platform similar to the usual sidewalk elevators would bring the freight into position together with cargo handling equipment after the cargo is parked overhead. Probably the best location for the consolidated freight terminal, itself, would be below the loading base. Many good reasons, such as space saving, lower construction cost, better storage location can be added to the obvious military interest in such underground terminals.

The cost of such a modern aircraft terminal will, undoubtedly, be high, yet its low-cost functional services to all carriers would reduce the ground expenses for air freight to less than 10 percent of its present cost, and thus pay back in a short time.

Today air cargo is an almost negligible item among the airlines' total revenues. Passenger and other animated cargoes pay better and more. But the airlines have begun to realize that passenger business is the sale of a luxury item. To stabilize the airline revenue, air carriers will have to do what all surface carriers did, and that is to concentrate on the carriage of inanimate objects as much as possible. No doubt exists among the carriers that with reasonable procedures and rates air cargo might mean the difference between life and slow death in the event of another economic depression.

To make air cargo eventually the 40 percent base of the air business will mean many changes in the airline structure. It means that air carriers will have to bring cargo costs down and transit speed up. Nothing in this case can be called more rightfully the key to this problem than the construction of proper air cargo terminals.

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NATIONAL AIRLINES has placed the second of its fleet of DC-6s into service. The new liner has added a daily round trip between Miami and New York, on a four-hour nonstop schedule.

The Navy Bureau of Aeronautics has contracted for the purchase of 100 sets of a new-type airborne radar for installation on transport planes of the Naval Air Transport Service. The contract, valued at approximately \$1,000,000, is with the Houston Corporation, Los Angeles. The new radar set, which will provide pilots with positive safety and navigational checks when flying blind over hazardous terrain, was developed by the Navy in cooperation with the American Airlines. It is for exclusive use on transport aircraft.

The AAF Air Materiel Command has made known tentative plans to establish the **National Air Museum** in the Mall adjacent to the Smithsonian Institution in Washington, D. C.

A new licensing arrangement between the **Autogiro Company of America** and the **United Aircraft Corporation** has been agreed upon. United Aircraft acquires the right to use more than 200 Autogiro Company patents in the general production of Sikorsky helicopters. The war-time license covered only Government procurement.

Harvard University Graduate School of Business reports that it is undertaking the study of "Competition in Air Transportation." It will be under the direction of **Professor George P. Baker**, former member of the CAB.

The **United Aircraft Export Corporation**, subsidiary of United Aircraft Corporation, has commenced operations with the taking over of the latter's Export Department by the new corporation. **Joseph M. Barr**, formerly manager of the Export Department, heads United Aircraft Export as president. The new firm will be the sole distributor of the products manufactured by Pratt and Whitney Aircraft, Hamilton Standard Propellers, Chance Vought Aircraft, and Sikorsky Aircraft.

PIA Okayed by CAB

Approval by the Civil Aeronautics Board of Peruvian International Airways' application to extend its operations to Washington, D. C. and New York has brought forth the announcement by General Harold L. George, president and general manager, that 24-hour service between Lima and New York on a basis of two round trips a week will be inaugurated very soon. PIA is planning daily service "as soon as the necessary equipment and operating facilities are available."

At the present time, PIA is operating two scheduled round-trip flights a week

between Lima and Havana, via Panama City. At the Cuban capital, the Peruvian airline connects with Chicago and Southern Air Lines (for transportation to the Midwest) and National Airlines. The CAB certificate will make PIA the first to connect Washington with South America.

George disclosed that PIA has completed arrangements with Chile which will permit extension of the airline's service from the Peruvian capital to Santiago. This service is to be inaugurated August 11. Operational and traffic facilities at Santiago will be shared with LAN which connects with Buenos Aires.



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- Atlantic Western Airlines, Inc.
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- *Caribbean-Atlantic Airlines, Inc.
Box 3214, San Juan, Puerto Rico
- Carolina Airways
Paragon Bldg., Morehead City, N. C.
- Case, James Walker
711-D Buena Vista Ave., Alameda, Calif.
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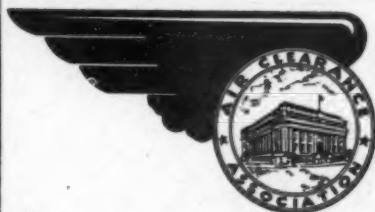
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Build Import-Export Air Cargo

(Continued from page 7)

range freight planes is very important to the military, because—judging by World War II—military air cargo outweighs military air passengers (whereas at present our international airlines are 85 percent passenger carriers.) That is why I think the armed services have a big interest in urging the development of export-import air cargo in peace as a means of building up a reserve of suitable freight planes.

If in the future it appears that the existing airlines are not going to develop this new cargo business, and are going to continue to concentrate almost both eyes on passengers, then the Government might well find it necessary to admit new United States airlines into the international field with a more cargo-minded point of view.

It should be remembered that domestic air cargo has enjoyed a recent growth in good part from the competition of non-scheduled and veterans' lines which came into the industry with a new point of view and began to develop new business.

It is my contention that it is more in the interest of the United States to concentrate on developing new cargo business in the international sphere than to try to legislate "consolidated carrier" on the basis of only passenger information. If cargo is considered, as well as passengers and mail, I think a much larger future for American aviation abroad will be opened up—one in which there will be room for a good many different airlines.

Air Freight Forwarders

(Continued from page 30)

National Airfreight Forwarders. Eleven plane-loads of 2,400-pound tractors were handled last month by NAF.

• Caribe Cargo, located at Pinellas International Airport, St. Petersburg, Florida, is offering "personalized service for out-of-town shippers who have air consignments destined for those countries bordering the Caribbean and the Gulf of Mex-

ico." The service extends as far south as Rio de Janeiro and Lima. Heading this air freight forwarding outfit are Everett "Ace" Adams and George P. Sampers, both formerly associated with Aerovias Latino Americanas.

• Phalanx Air Freight, San Francisco, has celebrated its first birthday. This firm,

which is headed by William K. Houston, handled some 2,000 individual shipments during its initial year in business.

• L. A. Cholot, formerly express traffic manager for PAA, has been appointed vice president of Air Express International Agency, Inc.

REFERENCE GUIDE TO PREVIOUS ISSUES

At regular intervals, AIR TRANSPORTATION publishes lists and other information of a specialized nature as a service to its thousands of readers. The following is a handy guide to this information which has appeared in this magazine in the past year.

August, 1946.....Designated Aircraft Maintenance Inspectors for Non-Scheduled Aircraft (Regions 1 to 4).
September, 1946.....Designated Aircraft Maintenance Inspectors for Non-Scheduled Aircraft (Regions 5 to 7).
May, 1947.....Foreign Airlines of the World.
May, 1947.....Texts of Sections 292.1 and 292.5, Economic Regulations.
June, 1947.....United States Irregular Air Carriers and Non-Certificated Cargo Carriers.
July, 1947.....Scheduled Airlines of the United States.
July, 1947.....International Air Express and Mail Tables.
August, 1947.....Holders and Applicants of Certificates of Public Convenience and Necessity.